

**SCREENING SITE INSPECTION REPORT
FOR
GREEN VALLEY LANDFILL
NAPERVILLE, ILLINOIS
U.S. EPA ID: ILD060360898
SS ID: NONE
TDD: F05-8802-035
PAN: FIL0254SA**

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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Green Valley Landfill site under contract number 68-01-7347.

The site was initially discovered in April 1974, when an application for a landfill permit was submitted to the Illinois Environmental Protection Agency (IEPA). The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by James K. Wiggins, of IEPA, on January 31, 1984.

FIT prepared an SSI work plan for the Green Valley Landfill site under technical directive document (TDD) F05-8703-375, issued on March 19, 1987. The SSI work plan was approved by U.S. EPA on December 2, 1987. The SSI of the Green Valley Landfill site was conducted on November 7, 8, and 9, 1988, under TDD F05-8802-035, issued on February 18, 1988.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of 10 soil/sediment samples, 3 surface water samples, and 4 monitoring well samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for

the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.

The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained from SSI work plan preparation and the site representative interview.

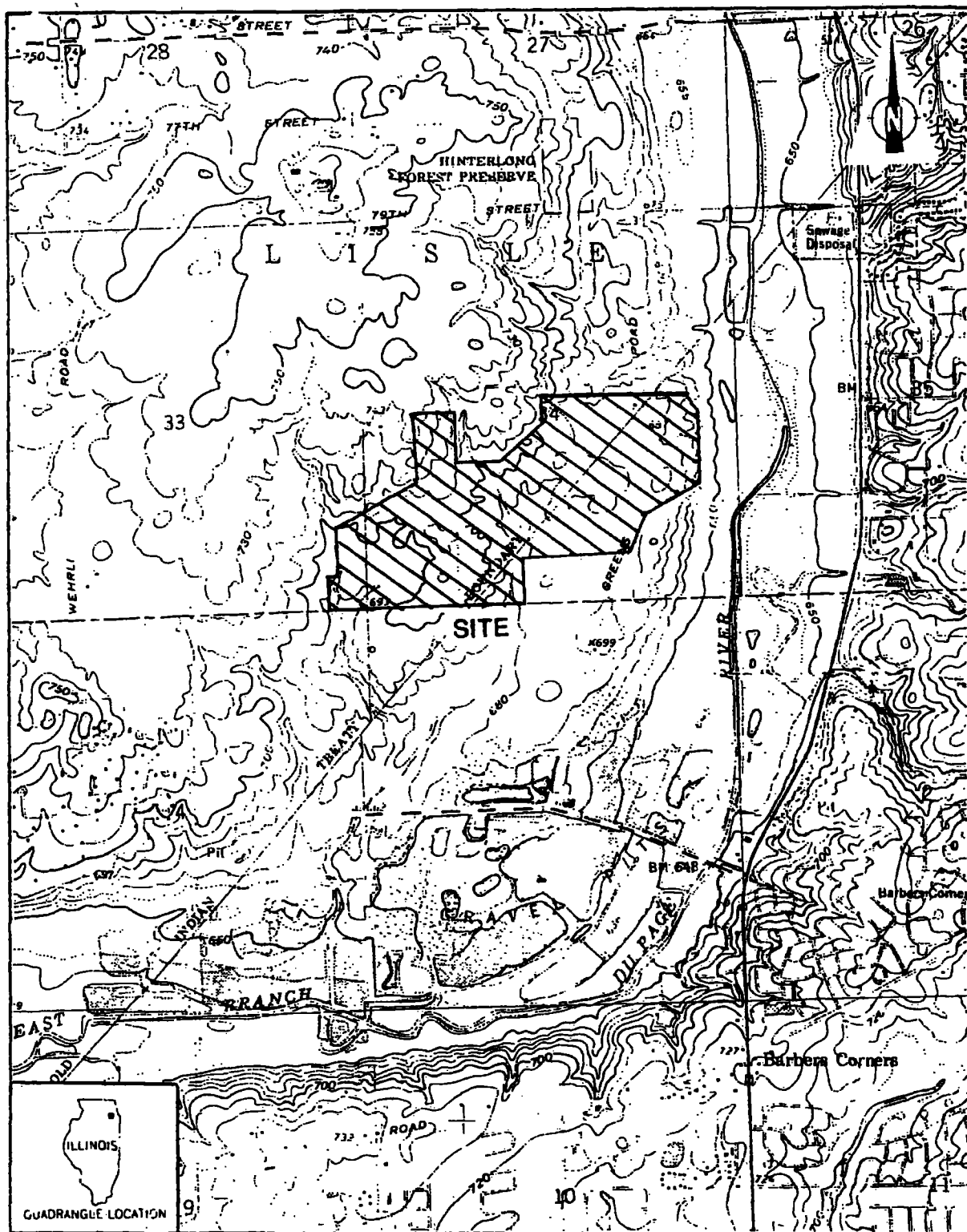
2.2 SITE DESCRIPTION

The Green Valley Landfill site is an active landfill. The site is located on a 234.74-acre parcel of land that is part of a forest preserve in the city of Naperville, in Du Page County, Illinois (S1/2 sec. 34, T.38N., R.10E.). The site is located 1 mile south of 75th Street on Greene Road (see Figure 2-1). A 4-mile radius map of the Green Valley Landfill site is provided in Appendix A.

2.3 SITE HISTORY

The site property is currently owned by the Forest Preserve District of Du Page County (FPDDC), which has owned the land since 1969. From 1949 through 1969, the site was farmland owned by the William B. Greene family of Naperville. Prior ownership is not known (Larm 1989).

The Green Valley Landfill site has been developed and operated by Waste Management of Illinois, Inc. (WMI), under contractual agreement with FPDDC since the initial permit for the site was issued in 1974. Permit number 1974-30-OP allowed the Green Valley Landfill site to handle municipal refuse and 2,000 gallons of septic tank pumpings per day (IEPA 1974). Supplemental permit number 1984-13-SP, issued in February 1984, granted the site, which then encompassed 200 acres, permission to develop a 34.74-acre expansion to the landfill. Permit



SOURCE: Ecology and Environment, Inc., 1989; BASE MAP: USGS, Romeoville, IL Quadrangle, 7.5 Minute Series, 1973.



FIGURE 2-1 SITE LOCATION

number 043803AAI, which was issued December 29, 1987, and expires January 31, 1990, allowed for the construction and operation of the landfill gas recovery flare that now exists on-site.

As of June 1988, an estimated 12.5 million cubic yards of (primarily) municipal refuse and septic pumpings had been deposited at the Green Valley Landfill site (Lewis et al. 1988). An undetermined amount of Chicago Metropolitan Sanitary District (CMSD) sewage sludge was disposed of at the site until 1979, after which time CMSD waste was no longer accepted at the site. Until 1985, the only liquid waste accepted for disposal at Green Valley Landfill was residential septic tank pumpings from Du Page County (Lewis et al. 1988). No liquid wastes have been accepted for disposal since 1985 (Lewis et al. 1988).

No documentation exists in FIT file information indicating that the site has ever accepted hazardous wastes for disposal. FIT files regarding the site do indicate that the Green Valley Landfill allegedly received approximately 100 drums of paint and solvents (IEPA 1984). Files also indicate that the landfill allegedly accepted, dried, and disposed of large amounts of CMSD sewage sludge (Sternard 1983).

In 1982, a complaint was filed against the landfill stating that silt carried by surface water runoff from the site had been deposited on the property south of the landfill. In response to this complaint, a sediment control basin was constructed at the southwest corner of the site.

A geotechnical study of the site was performed by EMCON Associates in 1973, before landfilling operations began at the site. A second geotechnical study of the site was conducted by Patrick Engineering in 1982, prior to the IEPA approval of the 34.74-acre expansion. In 1987, in order to monitor groundwater beneath the site, new monitoring wells were installed to replace older monitoring wells that had been installed in 1980.

According to WMI representatives, the entire site is lined with a 10-foot-thick clay liner (Lewis 1989). Approximately 50% of the original 200-acre landfill is underlain by 10 feet of in-situ clay, while the remaining 50% is underlain by a 10-foot-thick recompacted clay liner. The entire filled portion of the recently developed 34.74-acre expansion to the original landfill is also underlain by 10 feet of

recompacted clay. Under contractual agreement with VMI, Testing Services Corporation (TSC) of Carol Stream, Illinois, has verified that all clay-lined and clay-seal areas of the landfill have met all IEPA and FPDDC permit requirements with respect to clay liner thickness, permeability, and seal integrity (Lewis 1989).

In addition to the clay liner, the site has both leachate and methane gas collection systems throughout the landfill. Currently, all methane generated at the site is burned in the permitted landfill gas recovery flare on-site. All leachate generated at the site is collected in the leachate collection system and is shipped by tank truck to CID of Calumet City, Illinois, for final treatment/disposal (Lewis et al. 1988).

Upon completion, the landfill is to be capped with a 4-foot-thick clay cap and vegetated in accordance with IEPA and FPDDC requirements. A large portion of the landfill has already received the final clay cap. Current plans call for a 1993 closure/completion date, with the intent that the site will eventually become a ski hill (Lewis et al. 1988).

The landfill is currently inspected two times per month by Du Page County. The county has been delegated by IEPA to inspect the site (Gould 1989).

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the Green Valley Landfill site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan.

The U.S. EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Green Valley Landfill site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Melanie Nesterenko, FIT team leader, conducted an interview with Francis Lewis, of Waste Management of North America, Inc. Lewis had been designated spokesman for Waste Management of North America, Inc., with respect to the Green Valley Landfill site. The interview was conducted on November 7, 1988, at 1:00 p.m. in a diner at the intersection of State Highway 53 and 75th Street, approximately 1 mile northeast of Green Valley Landfill. Also present at the interview were Stanley Senger, FIT team member; Louis Bohlander, General Manager of the landfill; and Jerry Hartwig, spokesman for FPDDC. The interview was conducted to gather information that would aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

On the day following the site representative interview, FIT conducted a reconnaissance inspection of the Green Valley Landfill site and surrounding area in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities and to make observations to aid in characterizing the site. FIT also determined exact sampling locations during the reconnaissance inspection.

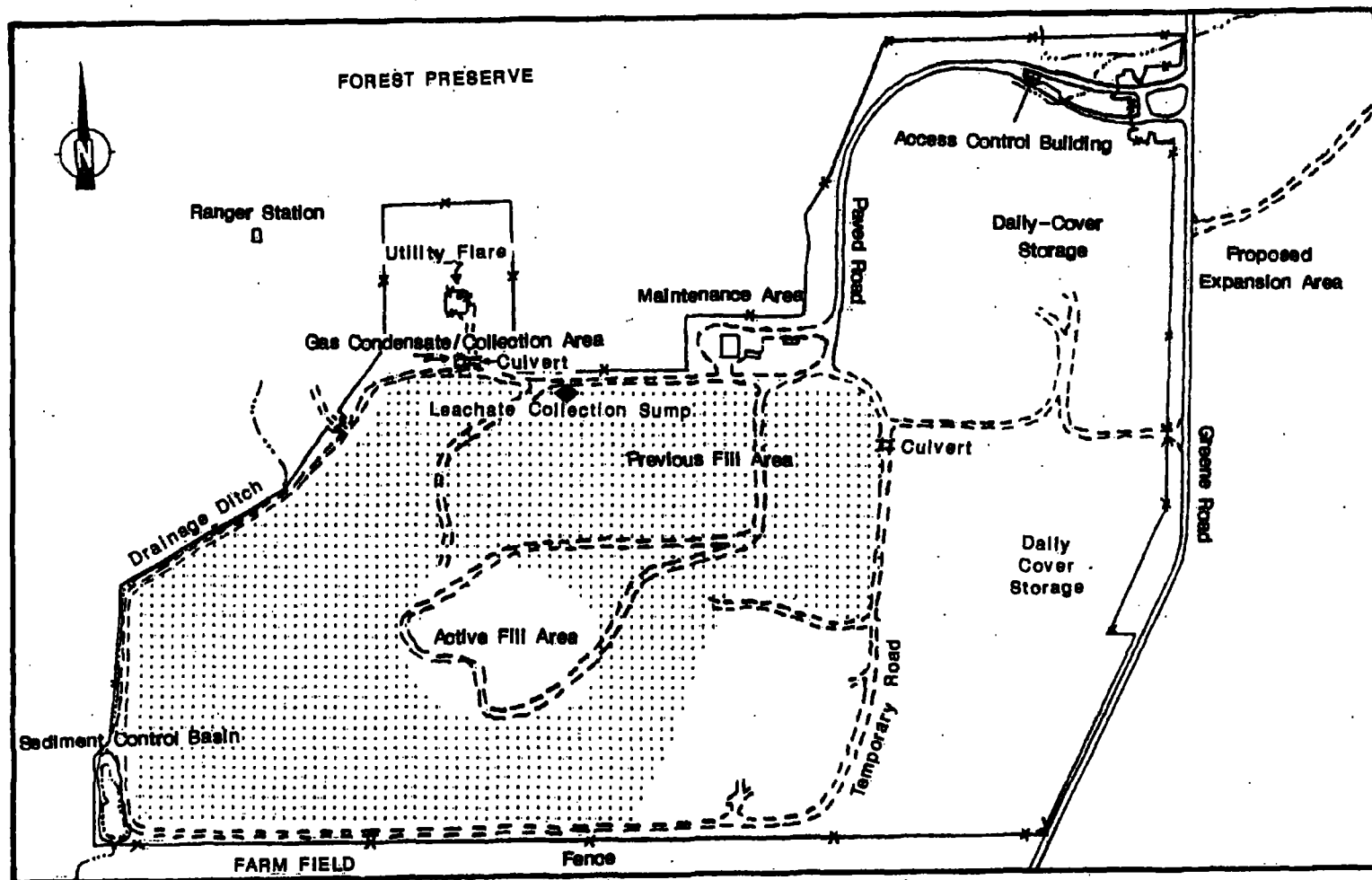
The reconnaissance inspection began on November 18, 1988, at 9:40 a.m. Francis Lewis accompanied FIT throughout the reconnaissance inspection.

Reconnaissance Inspection Observations. The Green Valley Landfill is located within a 400-acre forest preserve and is bordered by woods to the north and west. The area east of the site consists predominantly of grasses, with immature hardwoods scattered throughout. To the south, farm fields adjoin the landfill site and extend southward approximately 3/4 miles. The surface topography surrounding the site consists of small, rolling hills gently sloping toward lower elevations to the east and south.

A fence surrounds the site, and entry from Greene Road is controlled by operations personnel (see Figure 3-1 for locations of site features). A remote camera and alarm system linked to the county sheriff's department provide security at the site after hours. Operating hours are from 6 a.m. to 4 p.m. Monday through Friday, and from 6 a.m. to 1 p.m. on Saturday. Approximately 10,500 cubic yards of solid putrescible waste is received every working day (Lewis et al. 1988).

On-site, truck traffic was notably heavy. Temporary signs were in place to keep traffic flowing in an orderly manner. An equipment garage and maintenance area with two temporary trailer offices is located to the northeast of the landfill area. West of this area, approximately 1,000 feet, is a fenced landfill-gas-condensate loading station and a fenced gas utility flare. The leachate collection sump/loading station is also located in this area.

Slope along the north and west edges of the landfill varies from approximately 10% to 23%. The edges of the landfill are finished with a



SOURCE: Ecology and Environment, Inc. 1989; Waste Management, Inc. 1988.



FIGURE 3-1 SITE FEATURES

4-foot-thick clay cover and grassy vegetation. Approximate slope along the southern edge of the landfill is 27%. The southern edge is finished with the same clay cover and has been seeded, but a large area near the side's east end remains bare (Lewis et al. 1988).

A sediment control basin, located in the southwest corner of the landfill, and ditches and berms around the remainder of the site, help control the runoff of surface water and silt from the site to surrounding property. An intermittent stream runs adjacent to the site's western boundary and receives surface water runoff from the western one-third of the site via the sediment control basin. A second intermittent stream crosses the northern boundary of the site just east of the utility flare/gas condensate area. This stream has been rerouted to flow east, along the northern perimeter of the site toward the East Branch of the Du Page River. Along the south fence line, another drainage path, excavated through the side of a trench, directs pooled surface runoff southward onto the adjacent farm field.

Along the eastern edge of the landfill, adjacent to Greene Road, daily cover and clay earth material is stockpiled for future use, as the landfill expands in that direction. Although FIT observed that the actual landfill has yet to extend to within 1,000 feet of Greene Road, future expansion of the site will require that Greene Road be rerouted approximately 500 feet to the east (Lewis et al. 1988).

Photographs of the Green Valley Landfill site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine levels of U.S. EPA Target Compound List (TCL) compounds and U.S. EPA Target Analyte List (TAL) analytes present at the site. The TCL and TAL, with corresponding quantitation/detection limits, are provided in Appendix D.

On November 8 and 9, 1988, FIT collected three surface water samples, four monitoring well samples, nine surface soil samples, and one potential background soil sample. The sampling dates chosen were intended to match dates for quarterly monitoring well analysis set up between WMI and its contract laboratory, Gulf Coast Laboratories, Inc.

(GCLI). Soil samples were not split with the site representative, but GCLI collected monitoring well and surface water samples for WMI.

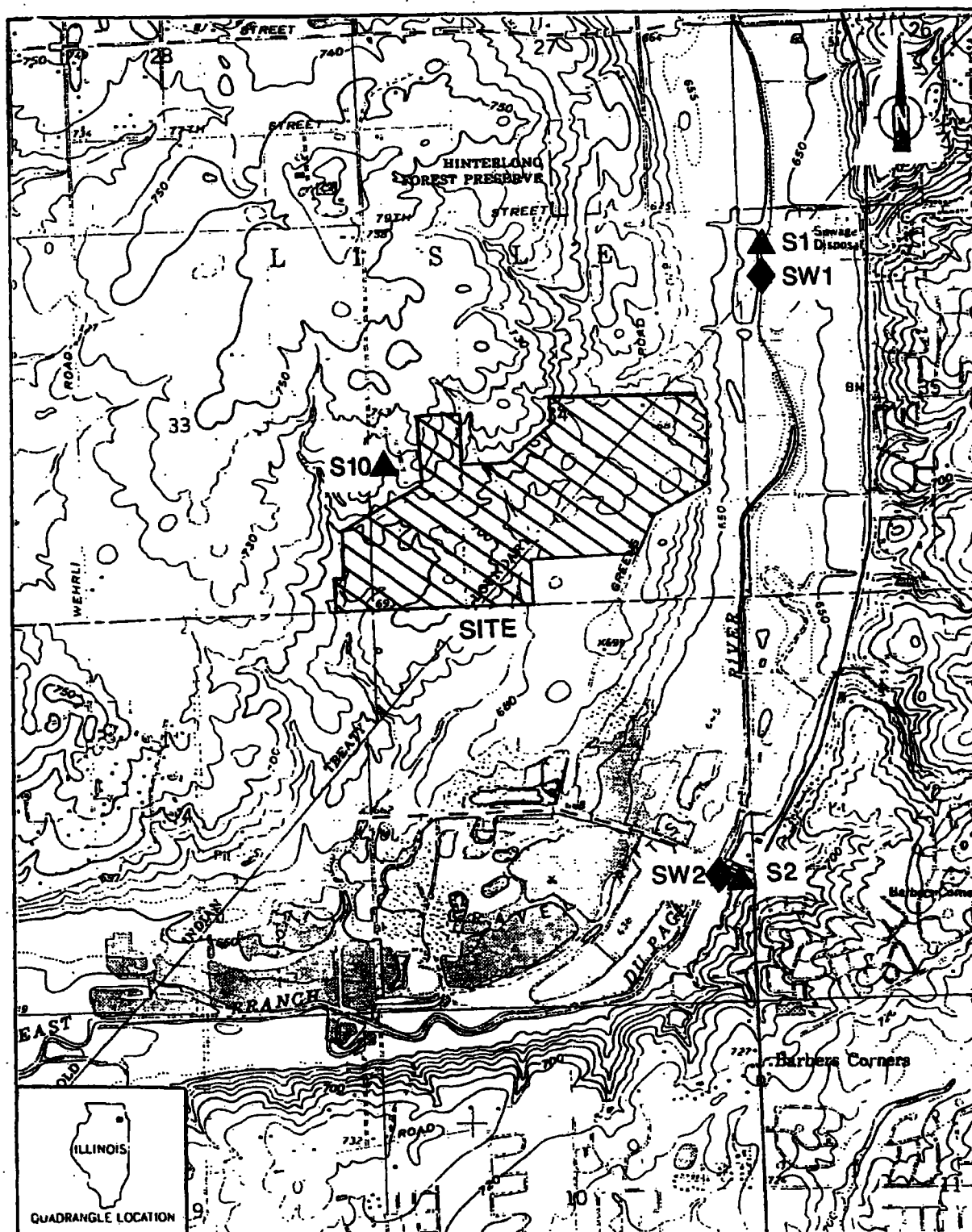
Soil Sampling Procedures. Surface soil samples S1, S2, and S10 were collected off-site (see Figure 3-2 for off-site soil sampling locations). Sample S1 was collected along the west bank of the East Branch of the Du Page River, approximately 1/3 mile northeast of the Green Valley Landfill site. Surface soil sample S2 was collected along the east bank of the East Branch of the Du Page River, approximately 30 feet south of the Royce Road bridge. The bridge is located approximately 2/3 miles southeast of the Green Valley Landfill site. Soil sample S1 was collected upgradient of the landfill to serve as a potential background sample. Soil sample S2 was collected downgradient of the landfill to determine whether TCL compounds and/or TAL analytes had migrated from the landfill to the East Branch of the Du Page River.

Surface soil sample S10 was collected as a potential background sample from a drainage ditch in an apparently undisturbed area of wooded FPDDC property, approximately 225 feet north of the northwest edge of the Green Valley Landfill site. Approximately 100 feet south of sample location S10, a foot bridge crossed over the drainage ditch. Sample S10 was collected to determine background chemical characteristics of soils in the area surrounding the Green Valley Landfill site.

Surface soil samples S3 through S9 were collected from potential areas of contamination on the Green Valley Landfill site (see Figure 3-3 for on-site soil sampling locations). These samples were collected from low-lying or downgradient locations to determine whether TCL compounds and/or TAL analytes were present in on-site soils, or were migrating away from the site.

Soil sample S3 was collected from a ditch approximately 5 feet east of the culvert at the landfill gas condensation area. Sample S4 was collected from the same ditch, approximately 100 feet east of S3. Surface drainage through this ditch is from west to east.

Surface soil samples S5, S6, and S7 were collected along the western boundary of the Green Valley Landfill site. Soil sample S7 was collected in the same drainage ditch as the potential background soil sample, S10. Sample S7 was collected approximately 225 feet south of



SOURCE: Ecology and Environment, Inc., 1989; BASE MAP: USGS, Romeoville, IL Quadrangle, 7.5 Minute Series, 1973.

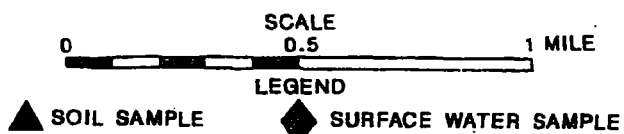
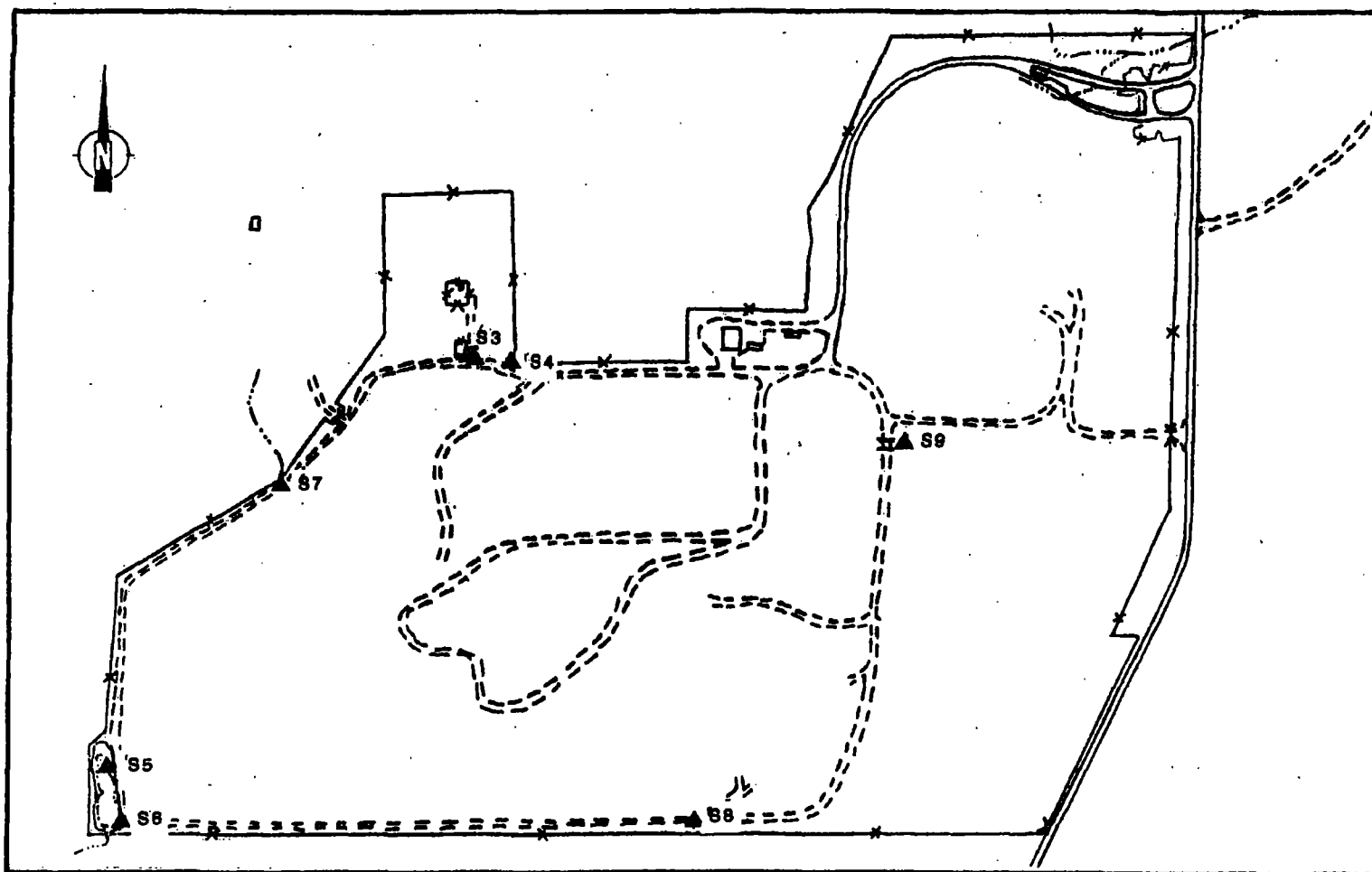


FIGURE 3-2 OFF-SITE SOIL AND SURFACE WATER SAMPLING LOCATIONS



SOURCE: Ecology and Environment, Inc. 1989; Waste Management, Inc. 1988.

SCALE
0 500 1000 1500 2000 FEET

FIGURE 3-3 ON-SITE SOIL SAMPLING LOCATIONS

S10, where the ditch crosses beneath the landfill boundary fence. Drainage flow in the ditch is toward the southwest corner of the site.

Soil samples S5 and S6 were collected from the east edge of the sediment control basin, located in the southwest corner of the landfill area. Sample S6 was collected approximately 20 feet east of the basin outlet and sample S5 was collected approximately 200 feet north of S6.

Surface soil sample S8 was collected from a low point in the drainage ditch that runs along the southern boundary of the Green Valley Landfill site. Standing water in this area is routed from the drainage ditch to the farm field south of the site through a small excavation in the south bank of the ditch.

Surface soil sample S9 was collected in a low-lying area near the northeast corner of the landfill area. Weeds and standing water surrounded the sample location and a culvert was located approximately 30 feet to the west. Truck traffic was also fairly heavy in the area; two temporary roads converged 40 feet northwest of sample location S9.

Each surface soil sample was obtained using a garden trowel and was transferred to a stainless steel bowl. Sample material from the bowl was placed in sample bottles using the trowel or stainless steel spoons (E & E 1987). Soil sampling procedures were videotaped and photographed by WMI and FPDDC representatives.

Standard E & E decontamination procedures were adhered to during the collection of all soil samples. The procedures included the scrubbing of all equipment (e.g., bowls, trowels, and spoons) with a solution of Alconox detergent and water, and triple-rinsing the equipment with distilled water before the collection of each sample. All soil samples were packaged and shipped in accordance with U.S. EPA-required procedures.

Surface Water Sampling Procedures. Surface water samples (indicated as SW1, SW2, and SW3) were collected off-site, from the East Branch of the Du Page River, to determine whether TCL compounds and/or TAL analytes had migrated from the Green Valley Landfill site to the river (see Figure 3-2 for off-site surface water sampling locations).

Surface water sample SW1, an upgradient (potential background) sample, was collected just south of soil sample S1 from the west bank of the Du Page River, approximately 200 feet south of the Village of

Woodridge Sewage Disposal Plant outfall. A FIT member collected sample SW1 after downgradient samples SW2 and SW3 to prevent the possible addition of contaminants to these samples through upstream activity. A FIT member collected sample SW1 by leaning out from a tree along the shoreline while submersing the sample bottle to approximately 6 inches beneath the water's surface.

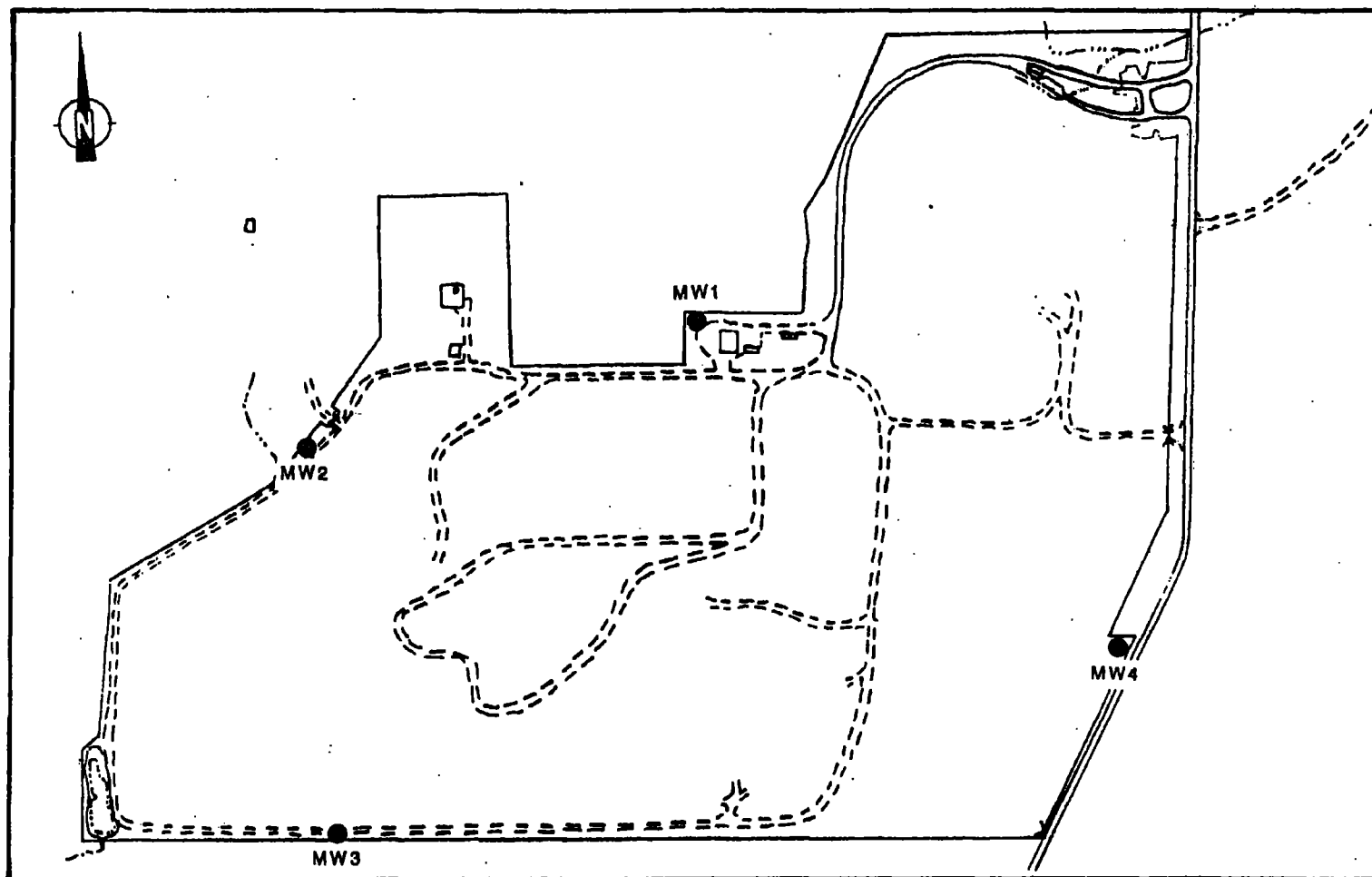
The downgradient samples, SW2 and SW3 (duplicate), were collected from the river approximately 30 feet south of the bridge on Royce Road, just south of soil sample S2. A FIT member collected these samples in a riffle zone by wading out 4 feet from shore and submersing the sample bottle, upstream of the sampler, to one-half the depth of the channel. Sampling procedures were videotaped and photographed by WMI and FPDDC representatives.

Standard E & E procedures were adhered to during the collection of all surface water samples. All surface water samples were packaged and shipped in accordance with U.S. EPA-required procedures.

Monitoring Well Sampling Procedures. Monitoring well samples (indicated as MW1 through MW4) were collected to determine whether TCL compounds and/or TAL analytes were present in groundwater in the vicinity of the site. All monitoring wells sampled were 2-inch diameter wells with a dedicated pumping system (Well Wizard) contained within the well casing. The wells were installed in October 1987 (Lewis et al. 1988). GCLI representatives purged each monitoring well of three to five times its standing volume and allowed each well to recharge prior to sampling.

Monitoring well 1 (designated by WMI as MWG122) was located approximately 150 feet northwest of the maintenance garage in the north-central portion of the site (see Figure 3-4 for locations of monitoring wells). Several attempts were made to purge this well of all water within reach of the integral pump before the required 3 1/2-gallon volume was obtained. The well was then allowed to recharge and a sample was obtained.

Monitoring well 2 (designated by WMI as MWG123) is located along the west boundary of the Green Valley Landfill site, approximately 100 feet northeast of soil sampling location S7.



SOURCE: Ecology and Environment, Inc. 1989; Waste Management, Inc. 1988.



FIGURE 3-4 MONITORING WELL SAMPLING LOCATIONS

Monitoring well 3 (designated by WMI as MWG125) is located approximately 1,200 feet east of the southwest corner of the site. The well was purged of seven gallons of standing water and allowed to recharge before a sample and matrix spike duplicate (MSD) were obtained.

Monitoring well 4 (designated by WMI as MWG129) is located approximately 900 feet north of the southeast corner of the site, adjacent to Greene Road.

FIT and GCLI representatives observed three dry monitoring wells along the south border of the Green Valley Landfill site. These wells were designated by WMI as MWG126, MWG127, and MWG128. According to geotechnical reports by EMCON (1973) and Patrick Engineering (1982), groundwater elevations are highest beneath the north and west areas of the site, so that groundwater flow in the shallow aquifer appears to be toward these monitoring wells and others located along Greene Road.

Monitoring well sampling procedures were videotaped and photographed by WMI and FPDDC representatives.

A distilled water field blank was prepared in accordance with U.S. EPA quality assurance/quality control (QA/QC) requirements. Due to the slow rate of groundwater recharge into the monitoring wells sampled, a duplicate sample was not obtained. However, FIT did collect a matrix spike duplicate along with sample MW3. All samples were filtered, packaged, and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, all soil, surface water, and monitoring well samples were analyzed under the U.S. EPA Contract Laboratory Program (CLP) for TCL compounds by S-Cubed of San Diego, California, and for TAL analytes by JTC Environmental Consultants of Rockville, Maryland.

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section includes results of chemical analysis of FIT-collected soil samples, surface water samples, and monitoring well samples for TCL compounds and TAL analytes.

4.2 RESULTS OF CHEMICAL ANALYSIS OF FIT-COLLECTED SAMPLES

Soil Sample Results. Chemical analysis of FIT-collected soil samples revealed substances from the following groups of TCL compounds and TAL analytes: polyaromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs), heavy metals, common soil constituents, and common laboratory artifacts (see Table 4-1 for complete soil sample chemical analysis results).

Surface Water Sample Results. Analysis of FIT-collected surface water samples revealed substances from the following groups of TCL compounds and TAL analytes: heavy metals, pesticides, and common soil constituents (see Table 4-2 for complete surface water sample chemical analysis results).

Monitoring Well Sample Results. Analysis of FIT-collected monitoring well samples revealed substances from the following groups of TCL compounds and TAL analytes: heavy metals, common soil constituents, and common laboratory artifacts (see Table 4-3 for complete monitoring well sample chemical analysis results).

U.S. EPA CLP quantitation/detection limits used in the analysis of soil, surface water, and monitoring well samples are provided in Appendix D.

Table 4-2
RESULTS OF CHEMICAL ANALYSIS OF
PIT-COLLECTED SURFACE WATER SAMPLES

Sample Collection Information and Parameters		SW1	SW2	Sample Number	
				Duplicate	Blank
Date		11/08/88	11/08/88	11/08/88	11/09/88
Time		1155	1015	1015	0900
CLP Organic Traffic Report Number		ECR41	ECR42	ECR43	ECR19
CLP Inorganic Traffic Report Number		NEB064	NEB065	NEB066	NEB064
Temperature (°C)		10	11	11	10
Specific Conductivity (micro/cm)		1300	1300	1300	0
pH		7.87	7.92	7.92	7.15
<u>Compound Detected</u>					
<u>(values in µg/L)</u>					
<u>Pesticides/PCBs</u>					
Endosulfan I		—	—	.060	—
<u>Analyte Detected</u>					
<u>(values in µg/L)</u>					
aluminum		555	725	733	—
arsenic		5.28	—	—	—
barium		30.48	27.68	28.68	—
calcium		83,600	82,700	85,700	—
copper		—	—	26.3	—
iron		9417	1,240	1,220	98.78
lead		5.5	4.43MB	3.82MB	—
magnesium		34,400	34,600	35,300	—
manganese		32.3	39	39.7	—
mercury		.233	—	.233	.343
potassium		8,750	9,160	8,750	—
silver		15.73M	—	—	—
sodium		182,000	176,000	180,000	—
— Not detected.					

Table 4-2 (Cont.)

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
R	Spike recovers outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
B	Value is real, but is above instrument DL and below CML.	Value may be quantitative or semi-quantitative.
J	Value is above CML and is an estimated value because of a QC protocol.	Value may be semi-quantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semi-quantitative.

Source: Ecology and Environment, Inc. 1989.

Table 4-3
RESULTS OF CHEMICAL ANALYSIS OF
PIT-COLLECTED MONITORING WELL SAMPLES

Sample Collection Information and Parameters	Sample Number				
	NW1	NW2	NW3	NW4	Blank
Date	11/08/88	11/08/88	11/08/88	11/08/88	11/08/88
Time	1530	1505	1330	1015	1050
CLP Organic Traffic Report Number	ECP44	ECP45	ECP46	ECP47	ECP50
CLP Inorganic Traffic Report Number	MEBU67	MEBU68	MEBU69	MEBU70	MEBU73
Temperature (°C)	10	10	10	10	13
Specific Conductivity (µmhos/cm)	900	800	800	900	4
pH	7.17	7.25	6.65	6.05	5.64
<u>Compound Detected</u> (values in µg/L)					
<u>Volatile Organics</u>					
methylene chloride	—	—	—	7	—
<u>Analyte Detected</u> (values in µg/L)					
aluminum	—	280	—	—	—
arsenic	—	—	7.38	—	—
barium	16.18	19.58	76.28	28.58	—
calcium	125,000	114,000	113,000	148,000	—
iron	1,020J	175J	2,450	914J	239J
lead	—	1.48	—	—	—
magnesium	67,400	58,300	65,600	69,400	—
manganese	67.3	62.8	47.8	159	—
mercury	—	—	—	.23J	.34J
potassium	2,250B	2,050B	2,050B	3,270B	—
sodium	4,360B	6,420	8,220	6,320	—

— Not detected.

Table 4-3 (Cont.)

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
B	Value is real, but is above instrument DL and below CML.	Value may be quantitative or semi-quantitative.
J	Value is above CML and is an estimated value because of a QC protocol.	Value may be semiquantitative.

Source: Ecology and Environment, Inc. 1989.

1997

[illegible]

Table 4-1 (Cont.)

Family (2) Section Information		Sample Number									
Section Number	Section Name	81	82	83	84	85	86	87	88	89	90
01000000	01000000	25.3	13.4	11.4	13.4	14.4	16	11.4	14.9	13.5	16.2
01000000	01000000	6.52	7.12	6.38	10.68	7.48	9.12	5.12	5.12	6.68	11.62
01000000	01000000	50.3	36.8	17.2	15.7	15.2	22.4	18.5	22.5	21.5	22
01000000	01000000	25000	16,200	15,600	17,900	16,900	15,500	17,900	21,600	22,000	24,000
01000000	01000000	1700	16.3	15.1	20.3	15.8	13.4	17.6	17.2	28.2	28.2
01000000	01000000	16,400	22,700	59,800	27,200	23,100	22,700	25,000	14,500	17,300	8,820
01000000	01000000	4.23	4.4	1.83	6.04	4.64	1.95	2.81	6.04	4.64	1.90
01000000	01000000	2.83	15.4	11.4	20.1	18.8	26.3	16.8	20.5	25.7	1.23
01000000	01000000	20.4	15.4	19.7	1,200	1,920	2,650	2,646	1,920	1,920	26.2
01000000	01000000	2,810	1,530	57,100	1,530	1,820	1,820	1,820	1,920	1,920	1,920
01000000	01000000	87,100	73.2	31.7	28.6	24.5	21.4	19.7	21.5	21.5	28.2
01000000	01000000	29	62.1	80.8	38.2	40.8	53	47	62.2	41.5	63
01000000	01000000	175									

Not detected.

Table 4-1 (Cont.)

COMPOUND QUALIFIERS

1

2

3

4

5

6

7

ANALYTE QUALIFIERS

DEFINITION

Indicates an estimated value.
This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides 10 ng/mL in the final extract shall be confirmed by GC/MS.

DEFINITION

Spike recovers outside GC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.

Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.

Value is real, but is above instrument DL and below CRL.

Value is above CRL and is an estimated value because of a GC protocol.

Post-digestion spike for fumage analysis is out of control limits (95-115%), while sample absorbance is <50% of spike absorbance.

Source: Ecology and Environment, Inc. 1989.

INTERPRETATION

Compound value may be semiquantitative.

Compound was confirmed by GC/MS and is quantitative.
Use pesticide/PCB listed values.

INTERPRETATION

Value may be quantitative or semiquantitative.

Data value may be biased.

Value may be quantitative or semiquantitative.

Value may be semiquantitative.

Value may be semiquantitative.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section discusses data and information that apply to potential migration pathways and targets of TCL compounds and/or TAL analytes that may be attributable to the Green Valley Landfill site.

The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

TAL analytes were detected in monitoring wells, but do not appear to be attributable to the Green Valley Landfill site. Substances detected in well samples cannot be attributed to the site because the same TAL analytes detected in monitoring well samples were also detected at similar concentrations in the background soil sample and are commonly found in soils of this area (USGS 1984). No TCL compounds were detected in the monitoring well samples other than a low concentration of a common laboratory artifact, methylene chloride.

A potential does exist for TCL compounds and/or TAL analytes to migrate from the site to groundwater in the vicinity of the site. This potential is based on the following information:

- TCL compounds and TAL analytes have been detected in soil samples collected on-site;
- Although the site is clay-lined and the surface soils on-site are primarily clay material, TCL compounds and TAL

analytes were detected in drainage ditches on-site which lead to areas off-site that may not be clay-lined or possess similar surficial clay materials; and

- Three of the site's downgradient monitoring wells were observed to be dry, so that no samples could be obtained to reveal the chemical content of the groundwater passing beneath them.

The potential for migration of TCL compounds and/or TAL analytes from the site to groundwater is low, based on the following information:

- The site is clay-lined;
- The site contains a leachate collection system; and
- Monitoring wells surround the site, and samples are collected quarterly for chemical analysis.

The site and the area surrounding the site are underlain by glacial deposits of predominantly silty-clay till, with lenses and zones of outwash sand and gravel. Beneath the site, the glacial deposits extend from the surface to a depth of approximately 40 to 60 feet. Horizontally bedded Niagaran dolomite (Silurian age) approximately 400 feet thick underlies, and is hydraulically connected to, the glacial deposits above. Beneath the Niagaran dolomite, Maquoketa shale (Ordovician age) extends another 300 feet and forms a confining layer. The aquifer of concern is therefore made up of the glacial deposits and the Niagaran dolomite (EMCON Associates 1973).

Within the glacial deposits, the glacial till, made up predominantly of silty clay, offers little groundwater and is not considered a groundwater resource (Patrick Engineering 1982). However, zones of permeable sand and gravel tend to become more frequent with depth so that, near the dolomite interface, beyond a depth of about 45 feet, an apparently continuous layer of sand and gravel extends laterally beneath the site (EMCON Associates 1973).

According to the EMCON geotechnical report, groundwater beneath the site travels in two directions. Groundwater within the glacial sand and gravel layers tends to move toward the southeast, discharging into the East Branch of the Du Page River. Groundwater within the Niagaran dolomite tends to flow in a westerly direction (EMCON Associates 1973). The groundwater surface is located at a depth of approximately 25 feet.

Wells used for drinking water in the area are open to groundwater at depths from approximately 40 feet to approximately 395 feet (well logs representative of the area and on-site soil borehole logs supplied by Hydro-Search, Inc., are provided in Appendix E). Local wells draw water from the aquifer of concern within a 3-mile radius of the site and serve approximately 145,221 people.

This estimate includes those served by the municipal water systems of the communities of Lisle, Bolingbrook, Woodridge, Downers Grove, and Naperville—a combined population of 143,353 people (Illinois State Water Survey 1986). The remaining 1,868 people within 3 miles of the site are served by private wells. This estimate was obtained by counting residences outside of corporate boundaries on United States Geological Survey (USGS) topographic maps of the area (USGS 1962, 1963) and multiplying by the 1980 Census averages for Du Page and Will Counties of 2.92 and 3.07 persons per household, respectively (U.S. Bureau of the Census 1982).

Water from two wells located on-site is used only for equipment maintenance (Lewis et al. 1988). On-site drinking water is obtained from a private bottler.

5.3 SURFACE WATER

Surface water sample SW1, collected from the East Branch of the Du Page River, north of the Green Valley Landfill site, revealed no TCL compounds or TAL analytes. The duplicate of surface water sample SW2, collected from the river south of the site, contained the TCL compound Endosulfan I. A potential exists that this TCL compound could be attributable to the Green Valley Landfill site, based on the following information:

- Endosulfan I was detected on-site, in surface soil sample S4;
- The drainage ditch from which S4 was obtained leads to the northeast corner of the site, and then toward the river east of Greene Road;
- Endosulfan I was not detected in surface water sample SW1, collected upstream of the site; and
- Endosulfan I was not detected in any off-site soil samples.

A potential exists that other TCL compounds and TAL analytes could migrate from the Green Valley Landfill site to the East Branch of the Du Page River, based on the following information:

- Surface soil samples collected from drainage ditches on-site contained TCL compounds and TAL analytes;
- All drainage areas on-site connect with intermittent streams off-site, which lead into the Du Page River at locations both east and south of the site;
- Discharge of potentially contaminated groundwater beneath the site could occur because groundwater in the uppermost sand and gravel lenses moves laterally toward the river (EMCON Associates 1973).

Surface soil sample S1, collected from the west bank of the East Branch of the Du Page River, contained TCL compounds similar to those detected in on-site soil samples S4 and S9. However, the TCL compounds detected in soil sample S1 were present at significantly lower concentrations than those detected in on-site soil samples and cannot be attributed to migration from the Green Valley Landfill site, based on the following information:

- Sample S1 was collected upstream of the point at which the drainage path where S4 was collected enters the river;
- The area from which soil sample S1 was obtained receives drainage from a large area extending north of the Green Valley Landfill site for approximately 1/2 mile;
- A sewage treatment facility discharges effluent just upstream of where soil sample S1 was collected; and
- The area from which soil sample S1 was obtained is subject to seasonal flooding, and subsequent migration of contaminants from numerous potential sources located upstream could occur.

The East Branch of the Du Page River is the nearest surface water body to the site. It is located approximately 1,500 feet east of the site. The river flows from north to south, trending westward approximately 1 mile south of the site. The river is used primarily for recreation (Lewis et al. 1988).

5.4 AIR

A release of potential contaminants to the air was not documented during the SSI of the Green Valley Landfill site. During the reconnaissance inspection, FIT site-entry instruments (OVA 128, explosimeter, oxygen meter, hydrogen cyanide monitor, and radiation monitor) did not detect levels above background concentrations at the site (E & E 1987). In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential exists for windblown contaminants to migrate off-site, based on the following information:

- TCL compounds and TAL analytes were detected in on-site surface soil samples; and

- Heavy equipment traffic on-site is conducive to dusty conditions.

5.5 FIRE AND EXPLOSION

According to James Simon, Deputy Fire Chief of the Lisle-Woodridge Fire Protection District, the Green Valley Landfill has experienced two fires in previous years (Simon 1989).

FIT observations and explosimeter readings indicated no apparent danger of fire and/or explosion at the site at the time of the SSI. However, a low potential for a fire and/or explosion to occur does exist due to the large amount of methane gas which is generated, vented, and burned daily at the site.

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, as well as interviews with local officials, there is no documentation of an incident involving direct contact with TCL compounds and/or TAL analytes at the Green Valley Landfill site. However, the potential for direct contact does exist, based on the following information:

- TCL compounds and TAL analytes have been detected at the site; and
- Eighteen people work at the site and an undetermined number of vehicle operators haul waste to the site daily.

The population within a 1-mile radius of the site is approximately 2,293 persons. This estimate was obtained using a USGS topographic map of the area of the site (USGS 1973). Outside the Bolingbrook and Woodridge municipal limits, house counts were multiplied by the Du Page and Will County 1980 Census averages of 2.92 and 3.07 persons per household, respectively. Within the municipal limits of Bolingbrook and Woodridge, planimeter readings were used to determine the remainder of the population within the 1-mile radius.

6. REFERENCES

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U.S. Bureau of the Census, 1982, 1980 Census of Population, General Population Characteristics, Illinois.

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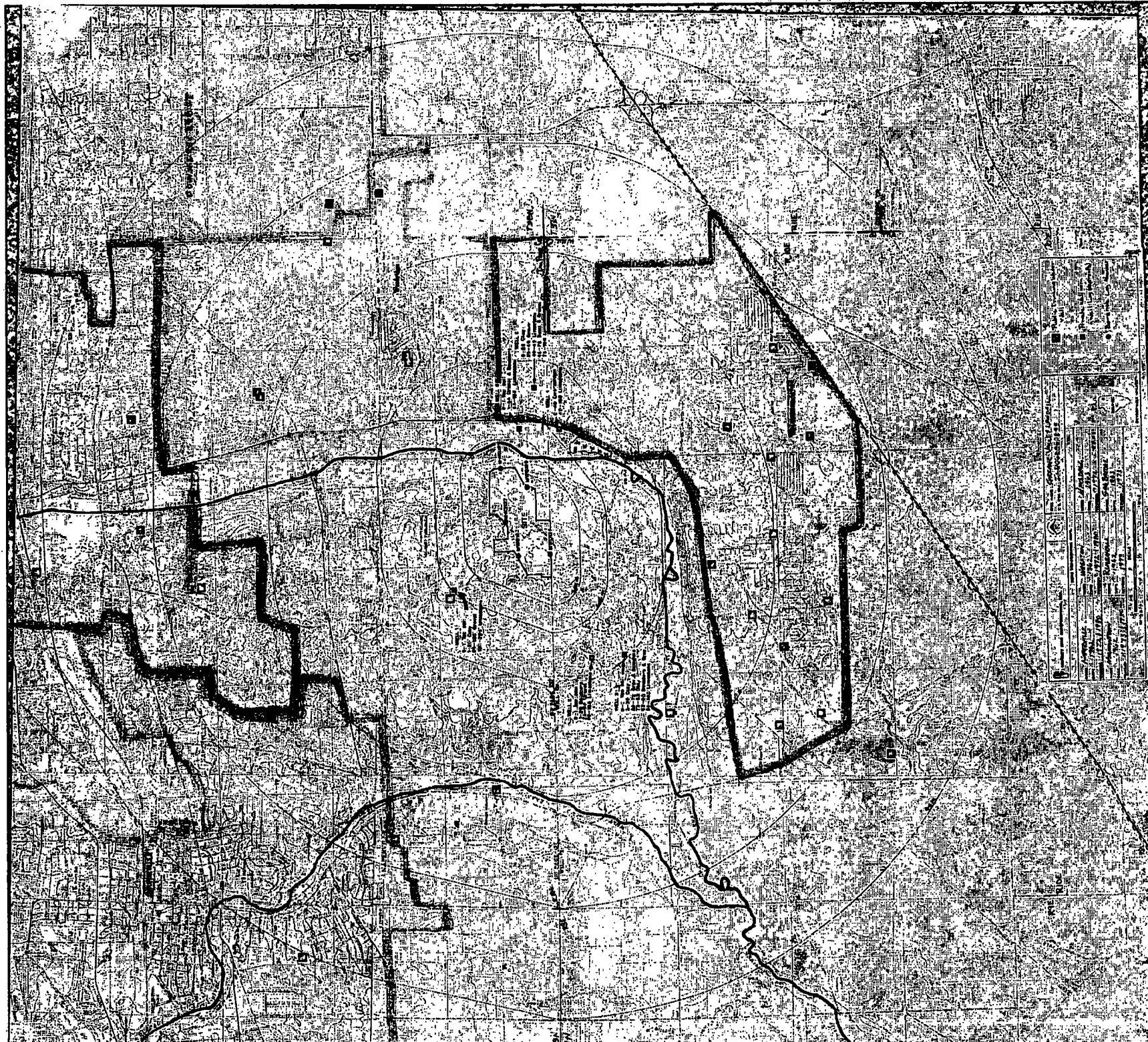
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2272:2

APPENDIX A

SITE 4-MILE RADIUS MAP



APPENDIX B

U.S. EPA FORM 2070-13



Site Inspection Report



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER D060360598

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) GREEN VALLEY LANDFILL
02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 9S. 610 GREEN ROAD
03 CITY NAPERVILLE
04 STATE IL 05 ZIP CODE 60540 06 COUNTY DU PAGE
07 COUNTY CODE 043 08 CONG. DIST. 13
09 COORDINATES
LATITUDE 41° 42' 00" N LONGITUDE 88° 05' 00" W
10 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☒ F. OTHER FOREST PRESERVE DISTRICT of DU PAGE County

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 11/8/88
MONTH DAY YEAR
02 SITE STATUS
☒ ACTIVE
☐ INACTIVE
03 YEARS OF OPERATION 1974 Presently Active
BEGINNING YEAR ENDING YEAR
04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR Ecology & Environment, Inc.
☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR
☐ E. STATE ☐ F. STATE CONTRACTOR
☐ G. OTHER

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
MELANIE NESTERENKO	BIOLOGIST	E & E, INC./FIT	(312) 663-9415
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
STANLEY SENDER	WATER RESOURCE MANAGER	E & E/FIT	() SAME
KURT SIMS	EARTH SCIENTIST	E & E/FIT	() SAME
RONNIE GALMORE	TECHNICIAN	E & E/FIT	() SAME
DAN SULLIVAN	CHEMICAL ENGINEER	E & E/FIT	() SAME
RON SHORT	BIOLOGIST	E & E/FIT	() SAME
MARILOU MARTIN	ENVIRONMENTAL SCIENTIST	E & E/FIT	() SAME
13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS WASTE MGT. of North Am., INC., 1300 Willow Rd. NORTHBROOK, IL	16 TELEPHONE NO.
Bob Lewis	ENGINEER		(312) 498-0883
Louie Bohlander	LANDFILL GENERAL MGR.	GREEN VALLEY LANDFILL 9S. 610 GREENE ROAD NAPERVILLE, IL 60540	(812) 983-8770
Jerry Hartwig	ENGINEER, FOREST PRESERVE DIST.	Forest Preserve Dist. of DuPage Co. P.O. Box 2339, 185 Spring Ave. Glen Ellyn, IL 60138	(312) 790-4906
			()
			()
			()

17 ACCESS GAINED BY (Check one)
☒ PERMISSION
☐ WARRANT
18 TIME OF INSPECTION 11/8/88 0830
11/9/88 0830
19 WEATHER CONDITIONS
Partly Cloudy, high @ 50°F, light winds out of west 5-10 mph.
Partly Cloudy, @ 45°F, SW. winds 5-10 mph, light rain after 1130 hours.

IV. INFORMATION AVAILABLE FROM

01 CONTACT Tom Crause
02 OF (Agency/Department) Illinois EPA
03 TELEPHONE NO. (217) 782-9848
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM STANLEY SENDER
05 AGENCY E & E/FIT USEPA
06 ORGANIZATION Ecol. & Env., Inc. FIT
07 TELEPHONE NO. (312) 663-9415
08 DATE 01/12/89
MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☒ A SOLID
☐ B POWDER, FINES
☒ C SLUDGE
☐ D OTHER _____ (Specify)
☐ E SLURRY
☐ F LIQUID
☐ G GAS

02 WASTE QUANTITY AT SITE

(Measure of waste quantity must be independent)

TONS _____

CUBIC YARDS 10,500/day

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A TOXIC
☐ B CORROSIVE
☐ C RADIOACTIVE
☒ D PERSISTENT
☐ E SOLUBLE
☐ F INFECTIOUS
☐ G FLAMMABLE
☐ H IGNITABLE
☐ I HIGHLY VOLATILE
☐ J EXPLOSIVE
☐ K REACTIVE
☐ L INCOMPATIBLE
☐ M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	—	Gr. V. Landfill received an undetermined volume of sludge from Chicago Metropolitan Sewerage District from 1974-'79. After 1979 this practice stopped; however septic pumpings from households in DuPage Co. were received until 1985. Again, no volume determined.
OLW	OLY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES	UNKNOWN	—	
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN	—	
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	UNKNOWN	—	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Aluminum (CSC)	7429-90-5	Monitoring Well Sample MW2	280	UG/L
MES	Arsenic	7440-38-2	" " " MW3	7.38	UG/L
MES	Barium (CSC)	7440-39-3	" " " MW3	76.28	UG/L
MES	Calcium (CSC)	7440-70-2	" " " MW4	148,000	UG/L
MES	Iron (CSC)	7439-89-6	" " " MW3	+ 2450	UG/L
MES	Magnesium (CSC)	7439-95-4	" " " MW4	69,400	UG/L
MES	Manganese	7439-96-5	" " " MW4	159	UG/L
MES	Mercury	7439-97-6	" " " MW4	+ 235	UG/L
MES	Potassium (CSC)	7440-09-7	" " " MW4	32708	UG/L
MES	Sodium (CSC)	7440-23-5	" " " MW3	8220	UG/L
MES	Aluminum (CSC)	7429-90-5	Soil Sample S8	+ 14,100	Mg/Kg
MES	Antimony	7440-36-0	Soil Sample S9	+ 24.7N	Mg/Kg
MES	Arsenic	7440-38-2	" " " S6	+ 11.4.7	Mg/Kg
MES	Barium (CSC)	7440-39-3	" " " S9	+ 112	Mg/Kg
MES	Cadmium	7440-43-9	" " " S9	+ 13.3	Mg/Kg
MES	Calcium (CSC)	7440-70-2	" " " S3	+ 69,100	Mg/Kg

V. FEEDSTOCKS (See Appendix for CAS numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	None		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (See specific references, e.g., state files, sample analyses, records)

E+E, Inc. Site Inspection, November 8 & 9, 1988; Site Interview November 7, 1988.
E+E, Inc./FIT Files, Region V.

* Continued from Part II, Section IV.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)					
01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES -	Chromium	7440-47-3	Soil Sample S9	+ 133	Mg / Kg
MES	Cobalt	7440-48-4	" " S4	++ 10.68	Mg / Kg
MES	Copper	7440-50-8	" " S9	+ 99.5	Mg / Kg
MES	Iron (CSC)	7439-89-6	" " S10	+ 25,300	Mg / Kg
MES	Lead	7439-92-1	" " S9	+ 71	Mg / Kg
MES	Magnesium (CSC)	7439-96-4	" " S3	+ 39,800	Mg / Kg
MES	Manganese	7439-96-5	" " S4	++ 634	Mg / Kg
MES	Mercury	7439-97-6	" " S9	+ .57 JN	Mg / Kg
MES	Nickel	7440-02-0	" " S9	+ 35.7	Mg / Kg
MES	Potassium (CSC)	7440-09-7	" " S6	+ 26.0	Mg / Kg
MES	Thallium	7440-20-0	" " S5	+ .86 JWNB	Mg / Kg
MES	Vanadium	7440-62-2	" " S8	+ 31.5	Mg / Kg
MES	Zinc	7440-66-6	" " S9	+ 315	Mg / Kg
OCC	acenaphthene	83-32-9	" " S4	100 J	Ug / Kg
OCC	Fluorene	86-73-7	" " S4	110 J	Ug / Kg
OCC	Phenanthrene	85-01-8	" " S4	1,700	Ug / Kg
OCC	Anthracene	120-12-7	" " S4	330 J	Ug / Kg
OCC	fluoranthene	206-44-0	" " S4	3200	Ug / Kg
OCC	Pyrene	129-60-0	" " S4	2600	Ug / Kg
OCC	benzo(a)anthracene	56-55-3	" " S4	1300	Ug / Kg
OCC	Chrysene	218-01-9	" " S4	1500	Ug / Kg
OCC	bis(2-ethylhexyl) phthalate	119-81-7	" " S9	+ 160 J	Ug / Kg
OCC	benzo(b)fluoranthene	205-99-2	" " S4	1500	Ug / Kg
OCC	benzo(k)fluoranthene	207-08-9	" " S4	1100	Ug / Kg
OCC	benzo(a)pyrene	50-32-8	" " S4	1400	Ug / Kg
OCC	indeno(1,2,3-cd)pyrene	193-39-2	" " S4	790	Ug / Kg
OCC	dibenzo(a,h)anthracene	53-70-3	" " S4	280 J	Ug / Kg
OCC	benzo(g,h,i)perylene	191-24-2	" " S4	820	Ug / Kg
OCC	Arochlor 1260	11096-82-5	" " S9	405 C	Ug / Kg
PSD	Heptachlor	76-44-8	" " S8	5.8 C J	Ug / Kg
PSD	Aldrin	309-00-2	" " S8	2.5 C J	Ug / Kg
PSD	Heptachlor epoxide	1024-57-3	" " S8	1.3 C J	Ug / Kg
PSD	Endosulfan I	959-98-8	" " S4	20 C	Ug / Kg
PSD	Dieldrin	60-57-1	" " S9	110 C	Ug / Kg
PSD	4,4'-DDE	72-55-9	" " S9	25 C	Ug / Kg
NOTES: Values listed reflect the highest concentration detected of each Compound / Analyte.					
+ Denotes compound / analyte was also detected in blank / background sample.					
++ Denotes highest concentration was found in blank / background sample.					
(CSC) Denotes analyte which is a common soil constituent					



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D060360898

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 <input checked="" type="checkbox"/> A. GROUNDWATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: <u>145,221</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: <u>TCL</u> Monitoring well water sample results indicate the presence of analytes commonly found in soils of this region. Soil sample results, however, indicate hazardous compounds and analytes exist in on-site soils at concentrations well above those levels found in the background sample. A low potential exists for these compounds and analytes to migrate into the shallow glacially deposited material and continue on into the deeper dolomite aquifer to which it is hydraulically connected.
01 <input type="checkbox"/> B. SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: <u>UNKNOWN</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: The East Branch of the DuPage River is not used as a drinking water source, but is used for recreational fishing and canoeing. Although TCL compounds and THL analytes were found in on-site soil samples, the probability that these contaminants might reach the river is low. FIT samples revealed no indication of surface water contamination attributable to the Green Valley LF site.
01 <input type="checkbox"/> C. CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED: <u>80,778</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: None detected or observed at time of investigation; however, methane gas generated within the landfill is burned via a utility flare northwest of the site. Should this flare fail, methane gas could be vented to the surrounding local atmosphere. Permit requirements state the flare is to be closed down if the flame cannot be maintained or relighted.
01 <input type="checkbox"/> D. FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED: <u>25,687</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: None observed by FIT at the time of the inspection. Lisle - Woodridge Fire District Files indicate two fires occurred on-site in previous years. An explosive condition may arise if the methane utility flare were to fail and release methane gas to the surrounding local atmosphere.
01 <input type="checkbox"/> E. DIRECT CONTACT (1/2 mile) 03 POPULATION POTENTIALLY AFFECTED: <u>2298</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: Eighteen employees at the landfill could potentially come into direct contact with soils on-site which have been shown to contain hazardous compounds and analytes. FIT obtained these contaminated samples from 0-12 inches of the surface of the soil. All water used for drinking on-site is obtained off-site (bottled water). Property is fenced with controlled gate.
01 <input type="checkbox"/> F. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: <u>~100 Acres</u>	02 <input type="checkbox"/> OBSERVED (DATE: <u>11-9-88</u>) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: Soil contamination on-site has been documented through testing. Hazardous compounds and analytes were detected in samples obtained from 0-12 inches deep. These samples were gathered primarily in low lying areas near the bottom of the exterior side slopes of the landfill. Samples gathered from the east half of the site showed greatest contamination.
01 <input type="checkbox"/> G. DRINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: <u>145,221</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: On-site Hazardous compounds and analytes exist in the soil as indicated in Part 2. The geology of the area indicates a low potential for these compounds and analytes to migrate to area private and municipal wells drawing from the dolomite aquifer. FIT collected no drinking water samples from the area. See (A) above.
01 <input type="checkbox"/> H. WORKER EXPOSURE/INJURY 03 WORKERS POTENTIALLY AFFECTED: <u>18</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: No record of worker injury or hazardous chemical exposure exists. Hazardous compounds and/or analytes have been shown to exist in soils on-site. Since water for drinking is from an off-site source, ingestion of potentially contaminated groundwater is not likely. Dermal contact and inhalation of these contaminated soils is possible if dusty conditions exist.
01 <input type="checkbox"/> I. POPULATION EXPOSURE/INJURY 03 POPULATION POTENTIALLY AFFECTED: <u>145,221</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION: Area residents obtain drinking water from the Silurian dolomite formation which underlies and is hydraulically connected to the shallow glacially deposited material beneath the landfill. (See (A) and (E) above).



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D060360892

II. HAZARDOUS CONDITIONS AND INCIDENTS *Continue*

01 ☒ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

A low potential exists due to the presence of contaminants in the soil.
(See summary data sheets).

01 ☒ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION (include name(s) of species)

The potential exist due to the presence of contaminants in the soil. (See Summary data sheets). FIT observed numerous raccoon and deer tracks around the ditch and fence areas surrounding the site. Two deer were observed fleeing the site's southern fence.

01 ☒ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

A low potential exists due to the presence of contaminants in on-site soils
(See K above).

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☒ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 145,221

04 NARRATIVE DESCRIPTION According to IEPA File Memo dated 09-17-80 and 03-03-83, large amounts of Chicago M.S.D. Sewage sludge were dried and stored in drying beds on-site. FIT obtained soil sample S9 from nearby these beds. Contamination of the soil here is evident but the containment offered here is not known.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☒ ALLEGED

04 NARRATIVE DESCRIPTION

In 1982 a complaint was filed stating that silt carried by surface water runoff had been deposited on the property south of the landfill. During this inspection it was noted that the sediment control structure located on the southwest corner of the site was functioning properly and no sediment problems were observed on the property adjoining the landfill in this area.

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or observed.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or observed.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

According to IEPA, Potential Hazardous Waste Site Preliminary Assessment dated 01/31/84, the site had allegedly received 100 drums of paint and solvents prior to that date under state permit. Other than the contamination observed in soil samples obtained by FIT, no other hazards were noted by FIT during the SSI.

III. TOTAL POPULATION POTENTIALLY AFFECTED: ~ 145,221

IV. COMMENTS

F.I.T. Site inspection was attended and Video taped by Green Valley Landfill/Waste Mgt. and Forest Preserve District of Du Page County representatives.

V. SOURCES OF INFORMATION (cite specific references, e.g., data files, sample analysis, reports)

E!E, Inc. Site Interview and Inspection, November 7, 8 and 9, 1988.

E!E, Inc./FIT Files, Region II.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I IDENTIFICATION
01 STATE IL 02 SITE NUMBER D 060360898

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input checked="" type="checkbox"/> C. AIR IEPA	043803AAI	12-29-87	01-31-90	IEPA/DARC Gas Utility Flare Permit
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPOC PLAN				
<input checked="" type="checkbox"/> G. STATE (Specify) IEPA	1994-30-DE and OP	10-3-74	None	Operations Permit
<input type="checkbox"/> H. LOCAL (Specify)				
<input checked="" type="checkbox"/> I. OTHER (Specify) State IEPA	1984-13-SP	02-15-84	None	Supplemental Permit for Expansion
<input type="checkbox"/> J. NONE				from 200 to 234.74 acres.

III. SITE DESCRIPTION

01 STORAGE/ DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE GA = gallon CY = Cubic Yards	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	4 total: Ticket office,
<input type="checkbox"/> C. DRUMS, ABOVE GROUND			<input type="checkbox"/> C. CHEMICAL/PHYSICAL	garage, 2 temporary
<input checked="" type="checkbox"/> D. TANK, ABOVE GROUND	Storage tanks (See # below)		<input type="checkbox"/> D. BIOLOGICAL	trailers.
<input checked="" type="checkbox"/> E. TANK, BELOW GROUND	10,000	GA (Diesel fuel)	<input type="checkbox"/> E. WASTE OIL PROCESSING	06 AREA OF SITE
<input checked="" type="checkbox"/> F. LANDFILL	12,500,000	CY	<input type="checkbox"/> F. SOLVENT RECOVERY	234.74
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER (Specify)	
<input type="checkbox"/> I. OTHER (Specify)				

07 COMMENTS

G. Valley Landfill receives putrescible household wastes from DuPage Co. and elsewhere at a rate of @19,500 cubic yards/day. The expected closure date is in 1993 with plans for the site to eventually become a ski hill. Leachate/waste containment is provided by a combination in situ/recompacted clay liner. Leachate volume gathered via the leachate collection system is estimated at 5000 gallons/quarter, with maximum generation to date of @15,000 gal./month. Leachate and waste machinery oils generated at the landfill are shipped to CTD in Calumet City, IL. for disposal.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)
<input checked="" type="checkbox"/> A. ADEQUATE, SECURE <input type="checkbox"/> B. MODERATE <input type="checkbox"/> C. INADEQUATE, POOR <input type="checkbox"/> D. INSECURE, UNSOUND, DANGEROUS
02 DESCRIPTION OF DRUMS, DROPS, LINERS, BARRIERS, ETC. Leachate/waste containment is provided by a combination in situ/recompacted clay liner with bottom and side walls a minimum of ten feet thick with maximum hydraulic conductivity of 1×10^{-9} cm/sec and minimum of 95% ASTM D698 density. Use of daily cover of waste is required. Leachate collection and methane removal systems remove liquids and methane; leachate is disposed of off-site, methane is burned via a permitted utility flare on-site. A sediment control lagoon exists on the southwest end of the landfill. Final cover requirement is 4-feet of clay.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
02 COMMENTS The landfill is entirely fenced with a camera system at the front gate and security alarms hooked to the police station. FPDPC rangers also routinely patrol the area of the site.

VI. SOURCES OF INFORMATION (For specific references, use of State Dept. Sample program, etc.)

Above ground Tanks (Storage) 2, gasoline; 350 GA, 500 GA 2, oil; 500 GA each 2, oil; 275 GA each 2, oil; 650 GA, 850 GA	Sources: E & E, Inc. / FIT inspection & Interview, 11/7, 8, 9/88 E & E, Inc. Files (FIT), Region I.
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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D060360898

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	02 STATUS	03 DISTANCE TO SITE
<div><div>SURFACE</div><div>WELL</div></div> <div>COMMUNITY A. <input type="checkbox"/></div> <div>NON-COMMUNITY C. <input type="checkbox"/></div> <div>WELL B. <input type="checkbox"/></div> <div>D. <input type="checkbox"/></div>	<div>ENDANGERED A. <input type="checkbox"/></div> <div>AFFECTED B. <input type="checkbox"/></div> <div>MONITORED C. <input type="checkbox"/></div> <div>D. <input type="checkbox"/></div> <div>E. <input type="checkbox"/></div> <div>F. <input type="checkbox"/></div>	<div>A. 0.75 mi</div> <div>B. 0.10 mi</div>

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING
(Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION
(No other water sources available)

☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION
(Ground other sources available) ☐ D. NOT USED, UNUSABLE

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL			
~145,221	0.10 mi			
04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
~25 ft	South east	~25 ft	7.6 x 10 ⁶ gpd	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings) The following municipal wells exist within 3 miles of the landfill: Woodridge #1 through #6; Downers Grove #14; Bolingbrook #1 through #12, #14; Lisle #5; and Naperville #8, #20 and #22. Of the Bolingbrook wells, three are not used for drinking water and four others exist as emergency sources. Naperville #8 is also used as an emergency source. Several private wells exist in the vicinity of the landfill as well. Private or public, all wells tap water from the Niagara dolomite aquifer of Silurian age except for Naperville #20, which is much deeper.

10 RECHARGE AREA	11 DISCHARGE AREA
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO COMMENTS: Seasonal rain and snow recharge the aquifer in this area.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO COMMENTS: Within 1500 ft. East of the landfill flows the East Branch of the DuPage River which is considered a discharge zone for the shallow glacially deposited sand and gravel.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION, DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME	AFFECTED	DISTANCE TO SITE (500 ft)
East Branch of DuPage River	<input type="checkbox"/>	~0.28 mi
	<input type="checkbox"/>	
	<input type="checkbox"/>	

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN	02 DISTANCE TO NEAREST POPULATION
<div>ONE (1) MILE OF SITE A. ~2298 NO. OF PERSONS</div> <div>TWO (2) MILES OF SITE B. ~25,687 NO. OF PERSONS</div> <div>THREE (3) MILES OF SITE C. ~55,604 NO. OF PERSONS</div>	0.14 mi

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
~7364	0.14 mi

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, currently populated urban area)

Within one mile of the site, the area is rather sparsely populated. Beyond one mile, however, the population increases sharply so that, within four miles, approximately 80,798 people reside. Single and multi-family residences, commercial, and industrial zones exist in the vicinity of the landfill. The landfill itself is surrounded by forest preserve to the north, east and west, and by farm fields to the south. When finished it shall lie about 1000 feet west of the East Branch of the DuPage River. Currently it is about 1500 feet west of that river. Municipal water wells within 3 miles serve about 143,353 people; 1668 more on private wells.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

IDENTIFICATION

01 STATE 02 SITE NUMBER

IL DD60360898

VI ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (check one)

☐ A. 10^{-8} - 10^{-9} cm/sec ☐ B. 10^{-6} - 10^{-8} cm/sec ☒ C. 10^{-4} - 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec
(see also Part 4, IV, 02 -- Liner description).

02 PERMEABILITY OF BEDROCK (check one)

☐ A. IMPERMEABLE (Less than 10^{-8} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} - 10^{-8} cm/sec) ☒ C. RELATIVELY PERMEABLE (10^{-2} - 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK

40-60 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

Unknown (ft)

05 SOIL pH

Unknown

06 NET PRECIPITATION

3 inches (in)

07 ONE YEAR 24 HOUR RAINFALL

2.4 (in)

08 SLOPE
SITE SLOPE

25-28%

DIRECTION OF SITE SLOPE
South West and
South east

TERRAIN AVERAGE SLOPE
1 to 8%

09 FLOOD POTENTIAL

SITE IS IN Unknown YEAR FLOODPLAIN

10

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY
N/A

11 DISTANCE TO WETLANDS (in acres minimum)

ESTUARINE

OTHER

A. _____ (mi)

B. 0.6 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

Unknown (mi)

ENDANGERED SPECIES: II

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

A. 1.0 (mi)

RESIDENTIAL AREAS; NATIONAL/STATE PARKS,
FORESTS, OR WILDLIFE RESERVES
(Within Forest Preserve District
of Du Page Co.)

B. 0.0 (mi)

AGRICULTURAL LANDS
PRIME AG LAND AG LAND

C. _____ (mi) D. ≤ 100 feet

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

SEE ATTACHED 4 MILE RADIUS MAP; Appendix A.

VII SOURCES OF INFORMATION (For specific references, e.g., data base, sample analysis, reports)

E/E, Inc. Site Interview and Inspection Nov. 7, 8, 9, 1988.

E/E INC./F.I.T. FILES, Region I.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE **IL** 02 SITE NUMBER **D060360898**

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
<u>GROUNDWATER</u>	4 on-site monitoring wells	S-cubed TCL Compounds: San Diego, CA 92121 JTC Environmental Consultants TAL Analytes: Rockville, MD 20850	ON-FILE
<u>SURFACE WATER</u>	2 off-site, DuPage River	S-cubed TCL Compounds: San Diego, CA 92121 JTC Env. Consultants TAL Analytes: Rockville, MD 20850	"
WASTE			"
AIR			
RUNOFF			
SPILL			
<u>SOIL</u> 10 total	7 on-site plus background	S-cubed TCL Compounds: San Diego, CA 92121 JTC Environmental Consultants TAL Analytes: Rockville, MD 20850	ON FILE
VEGETATION (soil)	2 off-site		" "
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Radiation Mini Alert	No readings greater than background.
OVA 128	No readings greater than background.
Explosimeter	No readings greater than background.
Oxygen Meter	No deviation above or below background.

IV. PHOTOGRAPHS AND MAPS

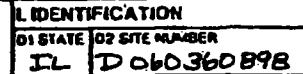
01 TYPE <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF <u>Ecology & Environment, Inc., Chicago, IL 60604</u> <small>(Name of organization or individual)</small>
03 MAPS <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS <u>Ecology & Environment, Inc., Chicago, IL 60604</u>

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

FIT tried to obtain water samples from five of the downgradient monitoring wells: three of them were dry. Dry wells included monitoring wells # G126, #G127 and #G128, all located along the southern-most boundary of the landfill. Samples were obtained from downgradient wells #G125 (sample # MW3, plus MSD) and #G129 (sample # MW4), with no attempt to retrieve samples from wells #G130 or #G131. Upgradient wells sampled include #G122 (sample # MW1) and #G123 (sample # MW2).

VI. SOURCES OF INFORMATION (Cite specific references, e.g., State Reg. Sample Analysis, reports)

E & E, Inc. Site Interview: Inspection, Nov. 7, 8 & 9, 1988.
E & E, Inc. / FIT FILES, Region V.

EPA FORM 2070-13 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D 060360898

II. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (if applicable)			
01 NAME WASTE Mgt. of Illinois, Division of Waste Mgt. of N. America		02 D+B NUMBER		10 NAME Waste Mgt. of North America		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 1 Westbrook Center		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.) 3003 Butterfield Road		13 SIC CODE	
05 CITY Westchester		06 STATE IL	07 ZIP CODE 60153	14 CITY Oakbrook		15 STATE IL	16 ZIP CODE 60521
08 YEARS OF OPERATION 1974-present		09 NAME OF OWNER Forest Preserve District of DuPage County					
III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)			
01 NAME None		02 D+B NUMBER		10 NAME N/A		11 D+B NUMBER -	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
IV. SOURCES OF INFORMATION (Cite specific references, e.g., State Reg. compile analysis, reports)							
E&E, Inc. Site Interview and Inspection, Nov. 7 th , 8 th ; 9 th , 1988. E&E/FIT FILES, Region V.							



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	D 060360898

II. ON-SITE GENERATOR

01 NAME N/A	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME Chicago Metropolitan Sewage Dist.	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 100 East Erie	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY Chicago	06 STATE IL	05 CITY	06 STATE 07 ZIP CODE 60611
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME No information available in FIT Files.	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., State Reg. sample analysis, reports)

E₁E, Inc. Site Inspection & Interview, Nov. 7, 8, 9, 1988.

E₁E, Inc. / FIT FILES, Region V.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D060360898

II PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ D. SPILLED MATERIAL REMOVED
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ E. CONTAMINATED SOIL REMOVED
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ F. WASTE REPACKAGED
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ H. ON SITE BURIAL
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ L. ENCAPSULATION
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ M. EMERGENCY WASTE TREATMENT
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ N. CUTOFF WALLS
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ P. CUTOFF TRENCHES/SUMP
04 DESCRIPTION

02 DATE

03 AGENCY

N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL
04 DESCRIPTION

02 DATE

03 AGENCY

N/A



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II PAST RESPONSE ACTIVITIES *(Continued)*

01 <input type="checkbox"/> R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> S. CAPPING/COVERING 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> T. BULK TANKAGE REPAIRED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> V. BOTTOM SEALED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> W. GAS CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> X. FIRE CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> Z. AREA EVACUATED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> 2. POPULATION RELOCATED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		

III SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

E/E / Est. Site Inspection / Interview, Nov. 7-9, 1988
FIT FILES, Region II.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

According to Cliff Gould of IEPA, the Green Valley Landfill is inspected twice per month by Du Page County. Du Page County has been delegated the authority to perform these inspections by the IEPA.

III. SOURCES OF INFORMATION (Can specify references, e.g., State Reg. sample analyzed, reported)

E/E/FIT Site Inspection/Interview, Nov. 7th, 8th, 9th, 1988
FIT FILES, Region V.

APPENDIX C

FIT SITE PHOTOGRAPHS

NOTE: The following photographic log is not complete due to camera problems encountered during the Green Valley Landfill site inspection.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 1 OF 20

U.S. EPA ID: TL0060360898

TDD: F05-8802-035

PAR: FL02545A

DATE: > Nov. 8, 1988

TIME: > 0950

DIRECTION OF
PHOTOGRAPH:

> Southwest

WEATHER
CONDITIONS:

> Pky. Cls., High @ 50°F

> Light west → east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

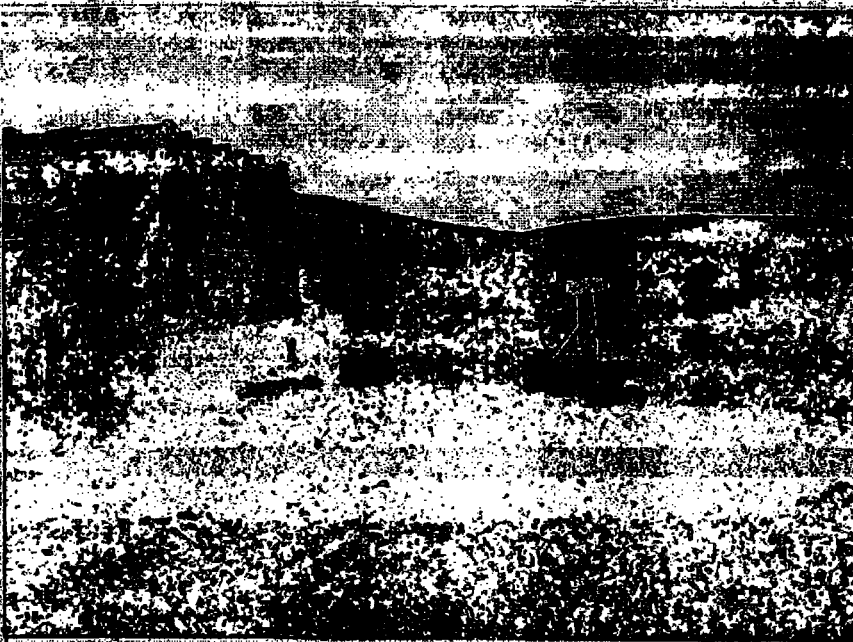
SAMPLE ID

(if applicable):

> Not Applicable (N/A)

DESCRIPTION: > Road leading to active fill area. Photo taken where

> road leading to active fill area splits from north perimeter
road. Disposal truck is travelling toward landfill active area.



DATE: > Nov. 8, 1988

TIME: > 0955

DIRECTION OF
PHOTOGRAPH:

> Southwest

WEATHER
CONDITIONS:

> Pky. Cls., High 50°F

> Light west → east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A

DESCRIPTION: > Photo taken from north perimeter road showing north slope

> of previously filled area and grassy vegetation.



FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 2 OF 20

U.S. EPA ID: ILD060360.898

TOD: F05-P802-035

PAR: F0625454

DATE: > Nov 8, 1988

TIME: > 0955

DIRECTION OF
PHOTOGRAPH:

> WEST

WEATHER
CONDITIONS:

> Pky. Cldy, high @ 50°F

> Light west-to-east
> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo taken along northern perimeter road shaving

> Forest Preserve District of DuPage County's wooded area north of
landfill and drainage ditch north of site.

DATE: > Nov 8, 1988

TIME: > 10:01

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER
CONDITIONS:

> Pky. Cldy, high 50°F

> Light west-to-east
> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo of fenced utility flume located along northern

> perimeter of site

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 3 OF 20

U.S. EPA ID: TLDO60360898

TDD: F05-8802-035

PAS: FL02545A

DATE: > Nov. 8, 1988

TIME: > 1002

DIRECTION OF
PHOTOGRAPH:

> West

WEATHER
CONDITIONS:

> 74° Cdy, high 85°F

> Light west - east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > photo of fenced landfill gas condensation/loading station
> located along north perimeter road of site. Landfill north slope
and methane gas vent in left portion of photo.

DATE: > Nov. 8, 1988

TIME: > 1005

DIRECTION OF
PHOTOGRAPH:

> East

WEATHER
CONDITIONS:

> 74° Cdy, high 85°F

> Light west - east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo (facing east) showing north slope of previously
> filled area, methane gas vent flare, vegetation, and drainage
south of northern perimeter road.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 11 OF 210

U.S. EPA ID: ILD060360898

TOD: F05-1802-035

PAR: FILE254SA

DATE: > Nov. 8, 1988

TIME: > 10:10

DIRECTION OF
PHOTOGRAPH:

> North west

WEATHER
CONDITIONS:

> Pky. Cdy, high 80°F

> Light west-east

> winds 5-10 mph

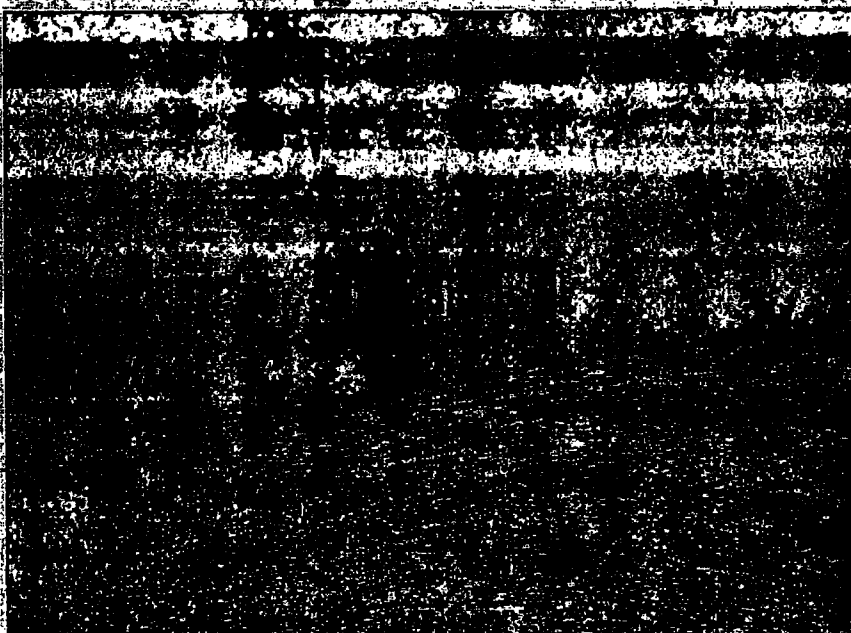
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo showing wells used for monitoring presence of

> landfill gases, taken along northwest perimeter road.

DATE: > Nov. 8, 1988

TIME: > 10:20

DIRECTION OF
PHOTOGRAPH:

> North east

WEATHER
CONDITIONS:

> Pky. Cdy, high 80°F

> Light west-east

> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Northeast view of previously filled area, grassy-sloped

> side of landfill, methane/gas vent flare, northwest perimeter road, and
> wooded area north and west of site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 5 OF 210

U.S. EPA ID: ILDO60360898

TDD: F05-P802-035

PAN: FIL02545A

DATE: > Nov. 8, 1988

TIME: > 1025

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> Pky. Cldy., high @ 50°F

> Light west → east
> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > View of sediment control lagoon at southwest corner
> of site. Vertical outfall pipe in foreground, wooded forest
preserve in background, landfill in right corner (upper) of photo.

DATE: > Nov. 8, 1988

TIME: > 1035

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER
CONDITIONS:

> Pky. Cldy., high 50°F

> Light west → east
> winds 5-10 mph

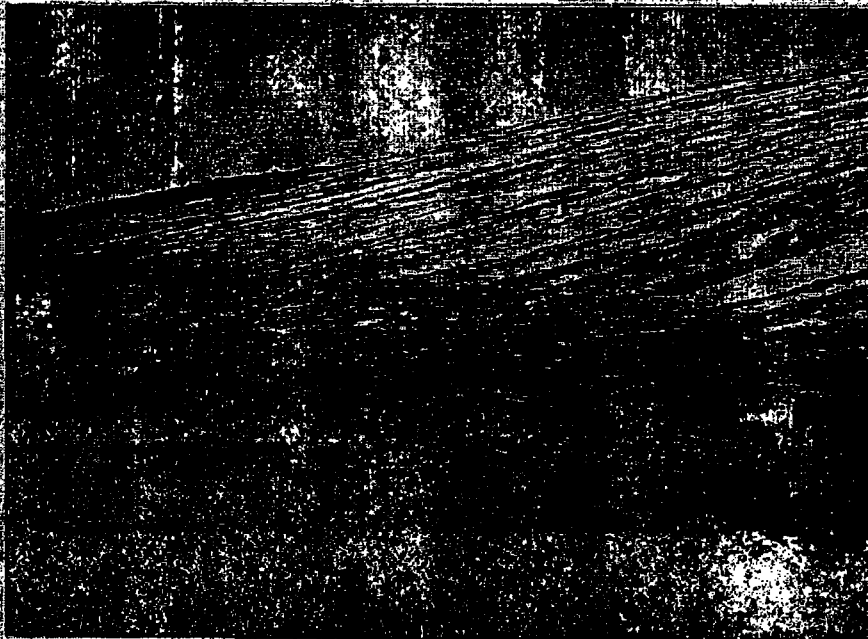
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > photo taken from south perimeter road showing southern
> face of landfill. grassy slope in background, freshly seeded slope in
foreground. Drainage here is to the East, towards the photographer.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE: 6 OF 20

U.S. EPA ID: TLDO60360898

TOO: F05-8802-035

PAN: FD 025454

DATE: > Nov. 8, 1988

TIME: > 1039

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER

CONDITIONS:

> Partly cloudy, high @ 50°F

> Light west → east

> Winds: 5-10 mph

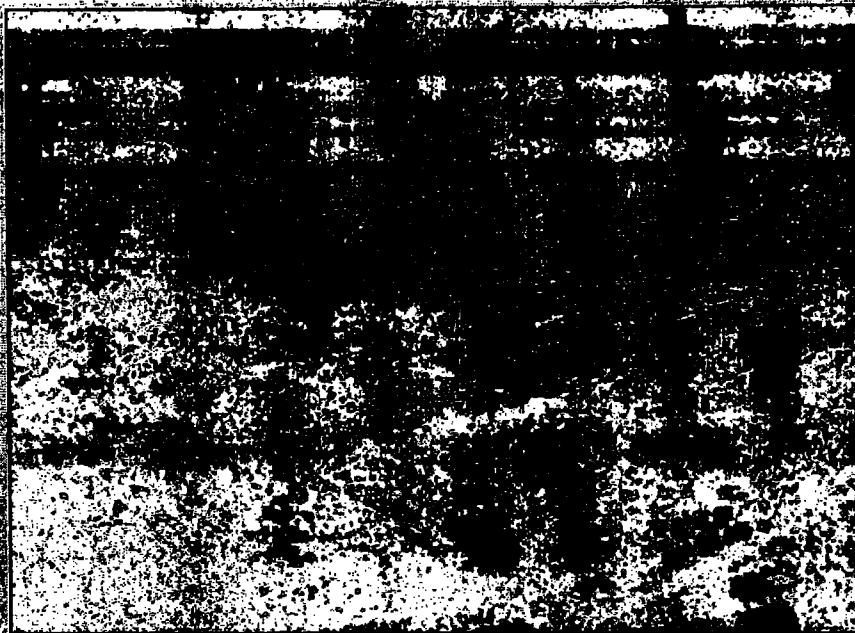
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Continuation of southern face of finished area.

> Receiving final cover in foreground, newly seeded area in background.
Drainage ditch at base of slope continues downward toward photographer.

DATE: > Nov. 8, 1988

TIME: > 1045

DIRECTION OF
PHOTOGRAPH:

> West

WEATHER

CONDITIONS:

> Partly cloudy, high 50°F

> Light west → east

> Winds: 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Facing west along south edge of landfill, drainage converges

> in a trench and flows into farm field south of site via a small
excavation in sidewall of trench. Soil sample SB1 was obtained from the small excav.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 7 OF 20

U.S. EPA ID: ILDOLC 360 898

TDD: F05-8802-035

PAN: FL02545A



DATE: > Nov. 8, 1988 TIME: > 1045 DIRECTION OF PHOTOGRAPH: > North PHOTOGRAPHED BY: > M. Martin

WEATHER CONDITIONS: > partly cloudy, high 50°F, light winds west to east 5-10 mph SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Facing north from Southeast corner of previously filled area. Active area is located near the top of the slope in left of photo; trucks in background are on top of previously filled area; and backhoe/crane sits on coarse gravel, beneath which lies clay liner material which will be the bottom of the landfill as it grows eastward.

FIELD PHOTOGRAPHY LOG SHEET

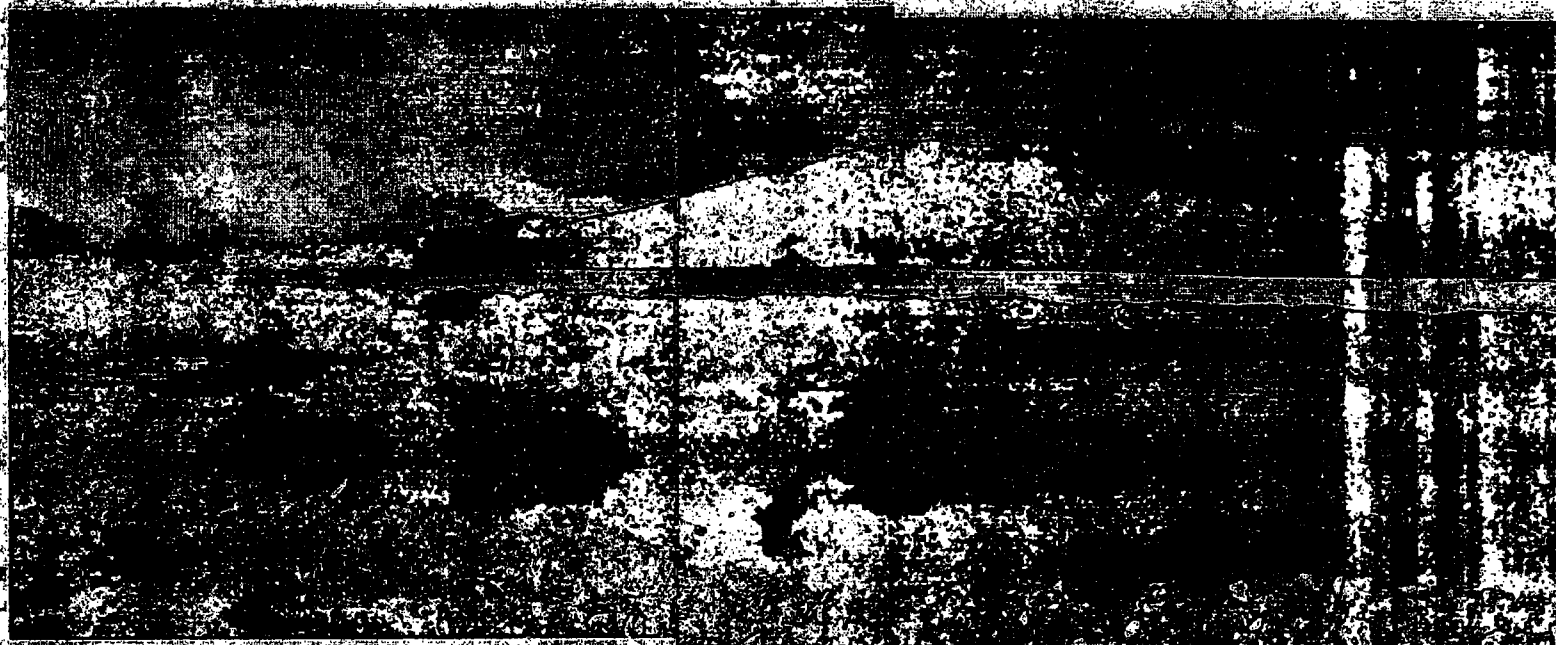
SITE NAME: GREEN VALLEY LANDFILL

PAGE 8 OF 20

U.S. EPA ID: ILDOL0360898

TDD: F05-8802-035

FAN: FILE2545A



DATE: > Nov 8 1988 TIME: > 1100 DIRECTION OF PHOTOGRAPH: > West PHOTOGRAPHED BY: > M. Martin

WEATHER CONDITIONS: > partly cloudy, high 50°F, light winds west → east 5-10 mph SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Facing southeast corner of previously filled area. Active area and fence for catching windblown litter lie at top of steep slope; newly placed coarse gravel lies on top of clay liner (white); small berm runs along top surface of new clay liner (center of photo) and excavation for future placement of re-worked clay liner is shown in left center of photo.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 9 OF 20

U.S. EPA ID: ILD060360898 TDD: F05-8802-035

PAN: FI0254SA

DATE: > Nov. 8, 1989

TIME: > 1300

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> Pky. Cldy. high @ 50%

> Light Westerly (W → E)

> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> MW1



DESCRIPTION: > monitoring well 1 being opened prior to purging

> and subsequent sample collection.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 10 OF 20

U.S. EPA ID: ILDO60360898

TDD: F05-8802-035

PAN: F0625454

DATE: > Nov. 8, 1988

TIME: > 1015

DIRECTION OF
PHOTOGRAPH:

> WEST

WEATHER
CONDITIONS:

> Pky. Cldy., high 80°F

> Light west → east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID
(if applicable):

> SW2



DESCRIPTION: > Close up of location where surface water sample SW2

> (and duplicate) was gathered.

DATE: > Nov. 8, 1988

TIME: > 1015

DIRECTION OF
PHOTOGRAPH:

> WEST

WEATHER
CONDITIONS:

> Pky. Cldy., high 80°F

> Light west → east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID
(if applicable):

> SW2



DESCRIPTION: > Perspective of location where surface water sample

> SW2 was collected.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 11 OF 20

U.S. EPA ID: ILD060360 89R

TOD: F05-8802-035

PAN: FLO254/54

DATE: > Nov. 8, 1988

TIME: > 1015

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER

CONDITIONS:

> Ppy. Cldy, high @ 50%

> Light west - east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Landfill Manager (WMI) video-taping FET collecting

> SW2 south of bridge on Royce Road

DATE: > Nov. 8, 1988

TIME: > 1020

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER

CONDITIONS:

> Ppy. Cldy, high 50%

> Light west - east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S2



DESCRIPTION: > Video-taping the collection of S2

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 12 OF 20

U.S. EPA ID: ILDO6036089E

TOD: F05-P802-035

PAN: FDL025454

DATE: > Nov. 8, 1988

TIME: > 1045

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER

CONDITIONS:

> 74° C, high 80° F

> Light west - east

> winds 5-10 mph

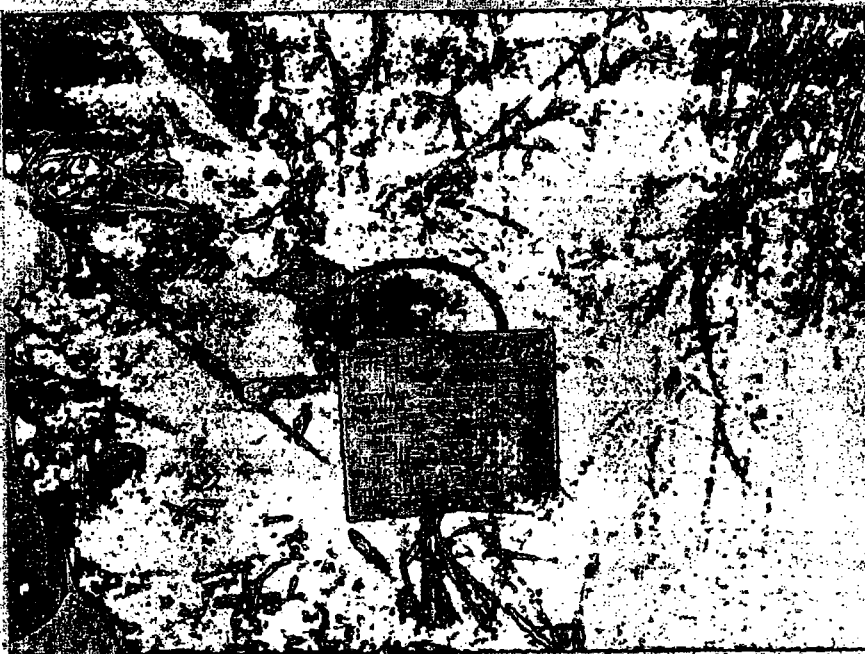
PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S2



DESCRIPTION: > Close up of surface soil/sediment location S2

DATE: > Nov. 8, 1988

TIME: > 1046

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER

CONDITIONS:

> 74° C, high 80° F

> Light west - east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S2



DESCRIPTION: > Perspective of S2

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 13 OF 20

U.S. EPA ID: ILD060360-898

TD: F05-8802-035

PAN: FIL025454

DATE: > Nov 8, 1988

TIME: > 4:55

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER

CONDITIONS:

> Thy. Cl., high 60°F

> Light west-east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> S. Senger

SAMPLE ID

(if applicable):

> S1



DESCRIPTION: > Closeup of location where surface water sample S1

> was collected from

DATE: > Nov 8, 1988

TIME: > 1:56

DIRECTION OF
PHOTOGRAPH:

> North east

WEATHER

CONDITIONS:

> Thy. Cl., high 60°F

> Light west-east

> Winds 10-15 mph

PHOTOGRAPHED BY:

> S. Senger

SAMPLE ID

(if applicable):

> S1



DESCRIPTION: > Perspective of S1

SCREENING SITE INSPECTION REPORT
FOR
GREEN VALLEY LANDFILL
NAPERVILLE, ILLINOIS
U.S. EPA ID: ILD060360898
SS ID: NONE
TDD: F05-8802-035
PAN: FIL0254SA

OCTOBER 10, 1989

EPA Region 5 Records Ctr.



327890



ecology and environment, inc.

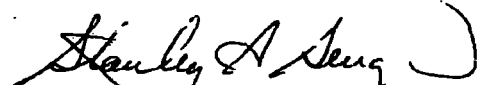
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

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SIGNATURE PAGE
FOR
SCREENING SITE INSPECTION REPORT
FOR
GREEN VALLEY LANDFILL
NAPERVILLE, ILLINOIS
U.S. EPA ID: ILD060360898
SS ID: NONE
TDD: F05-8802-035
PAN: FILO254SA

Prepared by:



Date: 10-31-89

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Date: 10-31-89

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Date: 10/31/89

Jerome D. Oskvarek
FIT Office Manager
Ecology and Environment, Inc.

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1. INTRODUCTION

Ecology and Environment, Inc., Field Investigation Team (FIT) was tasked by the United States Environmental Protection Agency (U.S. EPA) to conduct a screening site inspection (SSI) of the Green Valley Landfill site under contract number 68-01-7347.

The site was initially discovered in April 1974, when an application for a landfill permit was submitted to the Illinois Environmental Protection Agency (IEPA). The site was evaluated in the form of a preliminary assessment (PA) that was submitted to U.S. EPA. The PA was prepared by James K. Wiggins, of IEPA, on January 31, 1984.

FIT prepared an SSI work plan for the Green Valley Landfill site under technical directive document (TDD) F05-8703-375, issued on March 19, 1987. The SSI work plan was approved by U.S. EPA on December 2, 1987. The SSI of the Green Valley Landfill site was conducted on November 7, 8, and 9, 1988, under TDD F05-8802-035, issued on February 18, 1988.

The FIT SSI included an interview with site representatives, a reconnaissance inspection of the site, and the collection of 10 soil/sediment samples, 3 surface water samples, and 4 monitoring well samples.

The purposes of an SSI have been stated by U.S. EPA in a directive outlining Pre-Remedial Program strategies. The directive states:

All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for

the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act].... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.

The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred to another authority will receive a listing SI. (U.S. EPA 1988)

U.S. EPA Region V has also instructed FIT to identify sites during the SSI that may require removal action to remediate an immediate human health or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained from SSI work plan preparation and the site representative interview.

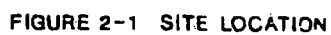
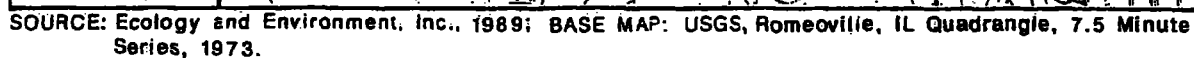
2.2 SITE DESCRIPTION

The Green Valley Landfill site is an active landfill. The site is located on a 234.74-acre parcel of land that is part of a forest preserve in the city of Naperville, in Du Page County, Illinois (S1/2 sec. 34, T.38N., R.10E.). The site is located 1 mile south of 75th Street on Greene Road (see Figure 2-1). A 4-mile radius map of the Green Valley Landfill site is provided in Appendix A.

2.3 SITE HISTORY

The site property is currently owned by the Forest Preserve District of Du Page County (FPDDC), which has owned the land since 1969. From 1949 through 1969, the site was farmland owned by the William B. Greene family of Naperville. Prior ownership is not known (Larm 1989).

The Green Valley Landfill site has been developed and operated by Waste Management of Illinois, Inc. (WMI), under contractual agreement with FPDDC since the initial permit for the site was issued in 1974. Permit number 1974-30-OP allowed the Green Valley Landfill site to handle municipal refuse and 2,000 gallons of septic tank pumpings per day (IEPA 1974). Supplemental permit number 1984-13-SP, issued in February 1984, granted the site, which then encompassed 200 acres, permission to develop a 34.74-acre expansion to the landfill. Permit



number 043803AAI, which was issued December 29, 1987, and expires January 31, 1990, allowed for the construction and operation of the landfill gas recovery flare that now exists on-site.

As of June 1988, an estimated 12.5 million cubic yards of (primarily) municipal refuse and septic pumpings had been deposited at the Green Valley Landfill site (Lewis et al. 1988). An undetermined amount of Chicago Metropolitan Sanitary District (CMSD) sewage sludge was disposed of at the site until 1979, after which time CMSD waste was no longer accepted at the site. Until 1985, the only liquid waste accepted for disposal at Green Valley Landfill was residential septic tank pumpings from Du Page County (Lewis et al. 1988). No liquid wastes have been accepted for disposal since 1985 (Lewis et al. 1988).

No documentation exists in FIT file information indicating that the site has ever accepted hazardous wastes for disposal. FIT files regarding the site do indicate that the Green Valley Landfill allegedly received approximately 100 drums of paint and solvents (IEPA 1984). Files also indicate that the landfill allegedly accepted, dried, and disposed of large amounts of CMSD sewage sludge (Sternard 1983).

In 1982, a complaint was filed against the landfill stating that silt carried by surface water runoff from the site had been deposited on the property south of the landfill. In response to this complaint, a sediment control basin was constructed at the southwest corner of the site.

A geotechnical study of the site was performed by EMCON Associates in 1973, before landfilling operations began at the site. A second geotechnical study of the site was conducted by Patrick Engineering in 1982, prior to the IEPA approval of the 34.74-acre expansion. In 1987, in order to monitor groundwater beneath the site, new monitoring wells were installed to replace older monitoring wells that had been installed in 1980.

According to WMI representatives, the entire site is lined with a 10-foot-thick clay liner (Lewis 1989). Approximately 50% of the original 200-acre landfill is underlain by 10 feet of in-situ clay, while the remaining 50% is underlain by a 10-foot-thick recompacted clay liner. The entire filled portion of the recently developed 34.74-acre expansion to the original landfill is also underlain by 10 feet of

recompacted clay: Under contractual agreement with VMI, Testing Services Corporation (TSC) of Carol Stream, Illinois, has verified that all clay-lined and clay-seal areas of the landfill have met all IEPA and FPDDC permit requirements with respect to clay liner thickness, permeability, and seal integrity (Lewis 1989).

In addition to the clay liner, the site has both leachate and methane gas collection systems throughout the landfill. Currently, all methane generated at the site is burned in the permitted landfill gas recovery flare on-site. All leachate generated at the site is collected in the leachate collection system and is shipped by tank truck to CID of Calumet City, Illinois, for final treatment/disposal (Lewis et al. 1988).

Upon completion, the landfill is to be capped with a 4-foot-thick clay cap and vegetated in accordance with IEPA and FPDDC requirements. A large portion of the landfill has already received the final clay cap. Current plans call for a 1993 closure/completion date, with the intent that the site will eventually become a ski hill (Lewis et al 1988).

The landfill is currently inspected two times per month by Du Page County. The county has been delegated by IEPA to inspect the site (Gould 1989).

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the Green Valley Landfill site. Individual subsections address the site representative interview, reconnaissance inspection, and sampling procedures. Rationales for specific FIT activities are also provided. The SSI was conducted in accordance with the U.S. EPA-approved work plan.

The U.S EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for the Green Valley Landfill site is provided in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

Melanie Nesterenko, FIT team leader, conducted an interview with Francis Lewis, of Waste Management of North America, Inc. Lewis had been designated spokesman for Waste Management of North America, Inc., with respect to the Green Valley Landfill site. The interview was conducted on November 7, 1988, at 1:00 p.m. in a diner at the intersection of State Highway 53 and 75th Street, approximately 1 mile northeast of Green Valley Landfill. Also present at the interview were Stanley Senger, FIT team member; Louis Bohlander, General Manager of the landfill; and Jerry Hartwig, spokesman for FPDDC. The interview was conducted to gather information that would aid FIT in conducting SSI activities.

3.3 RECONNAISSANCE INSPECTION

On the day following the site representative interview, FIT conducted a reconnaissance inspection of the Green Valley Landfill site and surrounding area in accordance with Ecology and Environment, Inc. (E & E), health and safety guidelines. The reconnaissance inspection included a walk-through of the site to determine appropriate health and safety requirements for conducting on-site activities and to make observations to aid in characterizing the site. FIT also determined exact sampling locations during the reconnaissance inspection.

The reconnaissance inspection began on November 18, 1988, at 9:40 a.m. Francis Lewis accompanied FIT throughout the reconnaissance inspection.

Reconnaissance Inspection Observations. The Green Valley Landfill is located within a 400-acre forest preserve and is bordered by woods to the north and west. The area east of the site consists predominantly of grasses, with immature hardwoods scattered throughout. To the south, farm fields adjoin the landfill site and extend southward approximately 3/4 miles. The surface topography surrounding the site consists of small, rolling hills gently sloping toward lower elevations to the east and south.

A fence surrounds the site, and entry from Greene Road is controlled by operations personnel (see Figure 3-1 for locations of site features). A remote camera and alarm system linked to the county sheriff's department provide security at the site after hours. Operating hours are from 6 a.m. to 4 p.m. Monday through Friday, and from 6 a.m. to 1 p.m. on Saturday. Approximately 10,500 cubic yards of solid putrescible waste is received every working day (Lewis et al. 1988).

On-site, truck traffic was notably heavy. Temporary signs were in place to keep traffic flowing in an orderly manner. An equipment garage and maintenance area with two temporary trailer offices is located to the northeast of the landfill area. West of this area, approximately 1,000 feet, is a fenced landfill-gas-condensate loading station and a fenced gas utility flare. The leachate collection sump/loading station is also located in this area.

Slope along the north and west edges of the landfill varies from approximately 10% to 23%. The edges of the landfill are finished with a

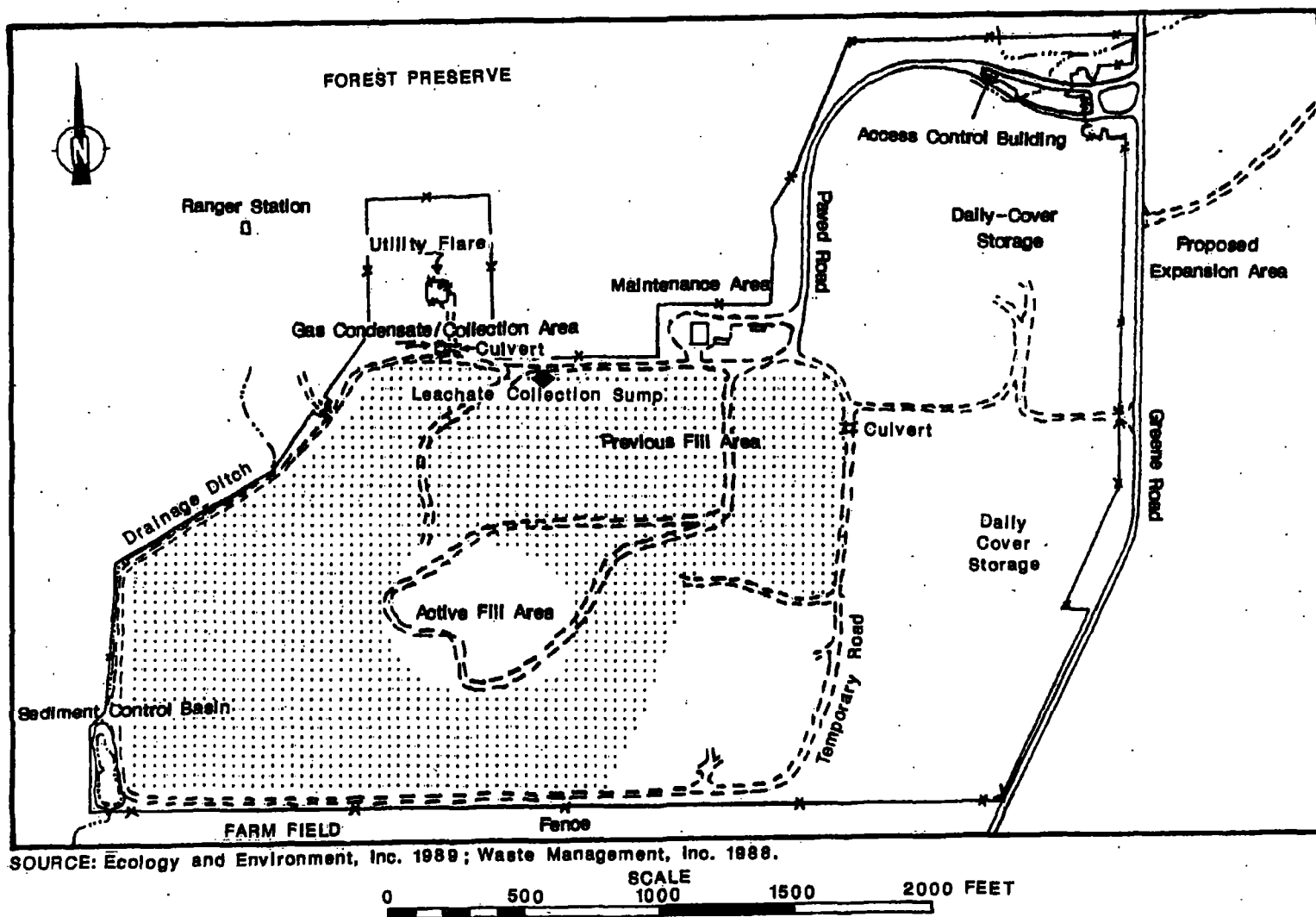


FIGURE 3-1 SITE FEATURES

4-foot-thick clay cover and grassy vegetation. Approximate slope along the southern edge of the landfill is 27%. The southern edge is finished with the same clay cover and has been seeded, but a large area near the side's east end remains bare (Lewis et al. 1988).

A sediment control basin, located in the southwest corner of the landfill, and ditches and berms around the remainder of the site, help control the runoff of surface water and silt from the site to surrounding property. An intermittent stream runs adjacent to the site's western boundary and receives surface water runoff from the western one-third of the site via the sediment control basin. A second intermittent stream crosses the northern boundary of the site just east of the utility flare/gas condensate area. This stream has been rerouted to flow east, along the northern perimeter of the site toward the East Branch of the Du Page River. Along the south fence line, another drainage path, excavated through the side of a trench, directs-pooled surface runoff southward onto the adjacent farm field.

Along the eastern edge of the landfill, adjacent to Greene Road, daily cover and clay earth material is stockpiled for future use, as the landfill expands in that direction. Although FIT observed that the actual landfill has yet to extend to within 1,000 feet of Greene Road, future expansion of the site will require that Greene Road be rerouted approximately 500 feet to the east (Lewis et al. 1988).

Photographs of the Green Valley Landfill site are provided in Appendix C.

3.4 SAMPLING PROCEDURES

Samples were collected by FIT at locations selected during the reconnaissance inspection to determine levels of U.S. EPA Target Compound List (TCL) compounds and U.S. EPA Target Analyte List (TAL) analytes present at the site. The TCL and TAL, with corresponding quantitation/detection limits, are provided in Appendix D.

On November 8 and 9, 1988, FIT collected three surface water samples, four monitoring well samples, nine surface soil samples, and one potential background soil sample. The sampling dates chosen were intended to match dates for quarterly monitoring well analysis set up between WMI and its contract laboratory, Gulf Coast Laboratories, Inc.

(GCLI). Soil samples were not split with the site representative, but GCLI collected monitoring well and surface water samples for WMI.)

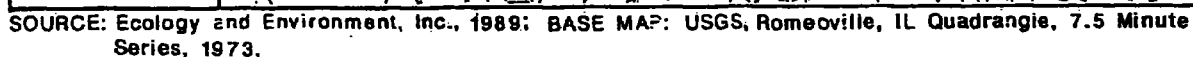
Soil Sampling Procedures. Surface soil samples S1, S2, and S10 were collected off-site (see Figure 3-2 for off-site soil sampling locations). Sample S1 was collected along the west bank of the East Branch of the Du Page River, approximately 1/3 mile northeast of the Green Valley Landfill site. Surface soil sample S2 was collected along the east bank of the East Branch of the Du Page River, approximately 30 feet south of the Royce Road bridge. The bridge is located approximately 2/3 miles southeast of the Green Valley Landfill site. Soil sample S1 was collected upgradient of the landfill to serve as a potential background sample. Soil sample S2 was collected downgradient of the landfill to determine whether TCL compounds and/or TAL analytes had migrated from the landfill to the East Branch of the Du Page River.

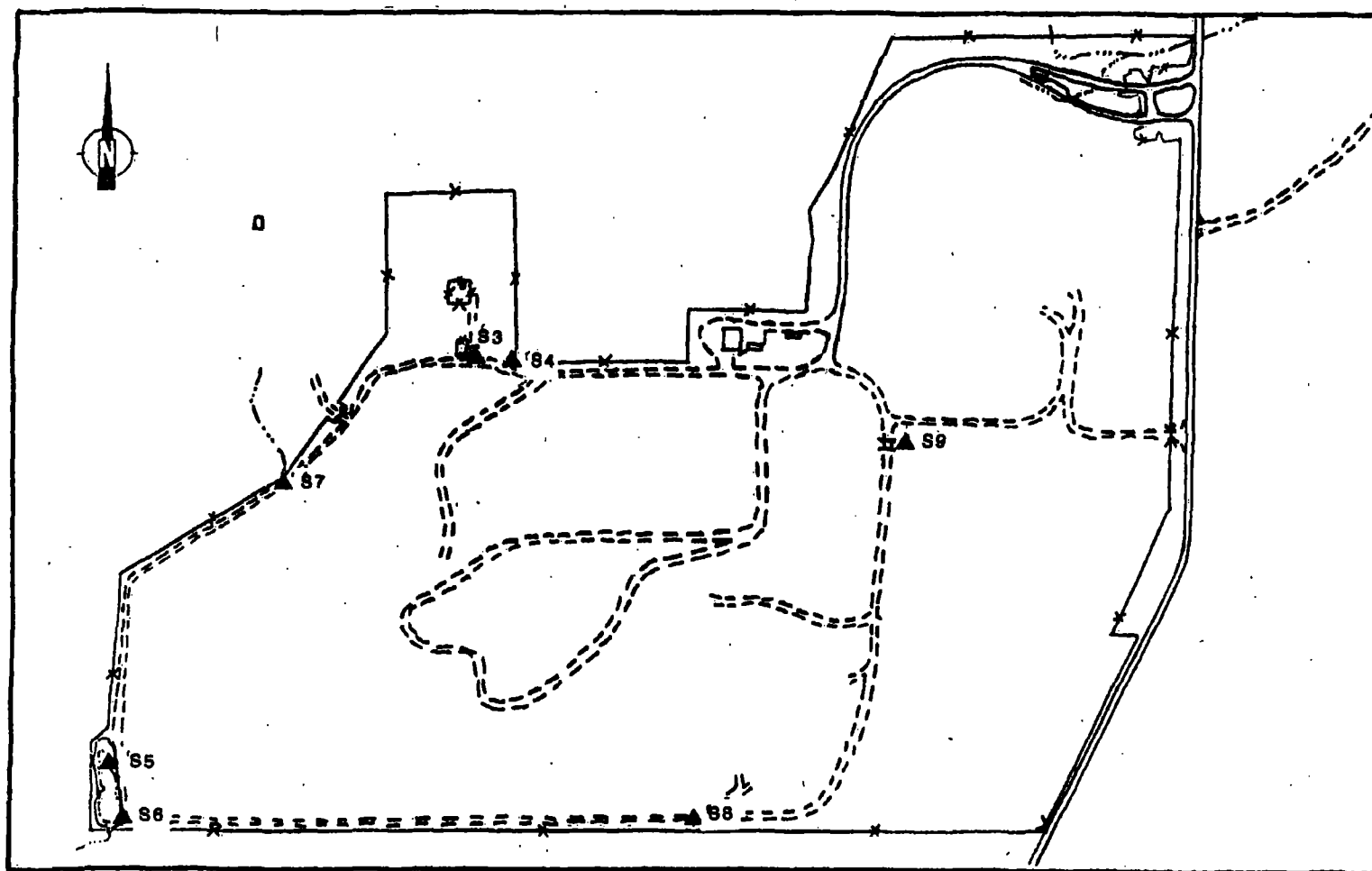
Surface soil sample S10 was collected as a potential background sample from a drainage ditch in an apparently undisturbed area of wooded FPDDC property, approximately 225 feet north of the northwest edge of the Green Valley Landfill site. Approximately 100 feet south of sample location S10, a foot bridge crossed over the drainage ditch. Sample S10 was collected to determine background chemical characteristics of soils in the area surrounding the Green Valley Landfill site.

Surface soil samples S3 through S9 were collected from potential areas of contamination on the Green Valley Landfill site (see Figure 3-3 for on-site soil sampling locations). These samples were collected from low-lying or downgradient locations to determine whether TCL compounds and/or TAL analytes were present in on-site soils, or were migrating away from the site.

Soil sample S3 was collected from a ditch approximately 5 feet east of the culvert at the landfill gas condensation area. Sample S4 was collected from the same ditch, approximately 100 feet east of S3. Surface drainage through this ditch is from west to east.

Surface soil samples S5, S6, and S7 were collected along the western boundary of the Green Valley Landfill site. Soil sample S7 was collected in the same drainage ditch as the potential background soil sample, S10. Sample S7 was collected approximately 225 feet south of





SOURCE: Ecology and Environment, Inc. 1989; Waste Management, Inc. 1988.

SCALE
0 500 1000 1500 2000 FEET

FIGURE 3-3 ON-SITE SOIL SAMPLING LOCATIONS

S10, where the ditch crosses beneath the landfill boundary fence. Drainage flow in the ditch is toward the southwest corner of the site.

Soil samples S5 and S6 were collected from the east edge of the sediment control basin, located in the southwest corner of the landfill area. Sample S6 was collected approximately 20 feet east of the basin outlet and sample S5 was collected approximately 200 feet north of S6.

Surface soil sample S8 was collected from a low point in the drainage ditch that runs along the southern boundary of the Green Valley Landfill site. Standing water in this area is routed from the drainage ditch to the farm field south of the site through a small excavation in the south bank of the ditch.

Surface soil sample S9 was collected in a low-lying area near the northeast corner of the landfill area. Weeds and standing water surrounded the sample location and a culvert was located approximately 30 feet to the west. Truck traffic was also fairly heavy in the area; two temporary roads converged 40 feet northwest of sample location S9.

Each surface soil sample was obtained using a garden trowel and was transferred to a stainless steel bowl. Sample material from the bowl was placed in sample bottles using the trowel or stainless steel spoons (E & E 1987). Soil sampling procedures were videotaped and photographed by WMI and FPDDC representatives.

Standard E & E decontamination procedures were adhered to during the collection of all soil samples. The procedures included the scrubbing of all equipment (e.g., bowls, trowels, and spoons) with a solution of Alconox detergent and water, and triple-rinsing the equipment with distilled water before the collection of each sample. All soil samples were packaged and shipped in accordance with U.S. EPA-required procedures.

Surface Water Sampling Procedures. Surface water samples (indicated as SW1, SW2, and SW3) were collected off-site, from the East Branch of the Du Page River, to determine whether TCL compounds and/or TAL analytes had migrated from the Green Valley Landfill site to the river (see Figure 3-2 for off-site surface water sampling locations).

Surface water sample SW1, an upgradient (potential background) sample, was collected just south of soil sample S1 from the west bank of the Du Page River, approximately 200 feet south of the Village of

Woodridge Sewage Disposal Plant outfall. A FIT member collected sample SW1 after downgradient samples SW2 and SW3 to prevent the possible addition of contaminants to these samples through upstream activity.

A FIT member collected sample SW1 by leaning out from a tree along the shoreline while submersing the sample bottle to approximately 6 inches beneath the water's surface.

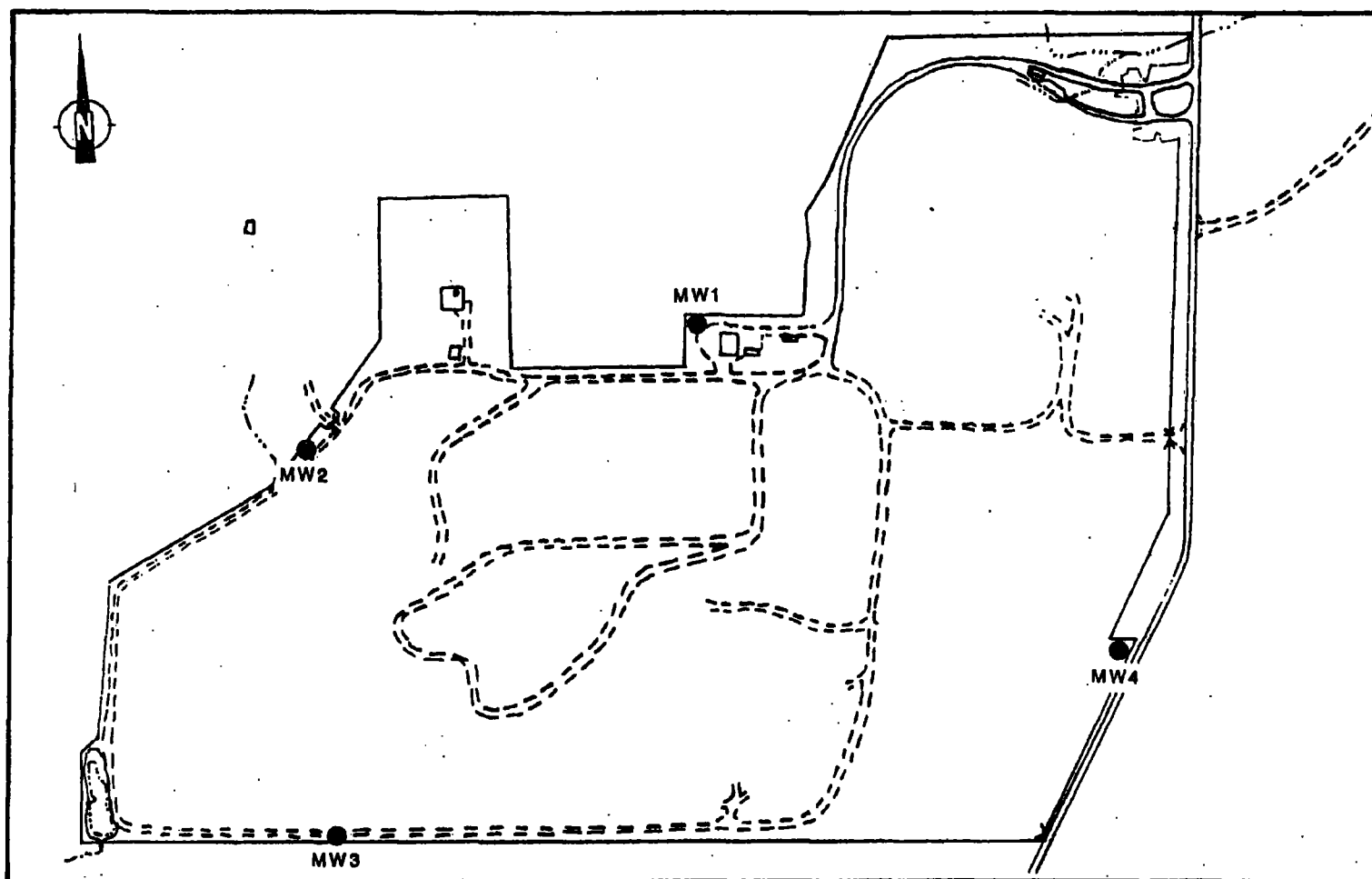
The downgradient samples, SW2 and SW3 (duplicate), were collected from the river approximately 30 feet south of the bridge on Royce Road, just south of soil sample S2. A FIT member collected these samples in a riffle zone by wading out 4 feet from shore and submersing the sample bottle, upstream of the sampler, to one-half the depth of the channel. Sampling procedures were videotaped and photographed by WMI and FPDDC representatives.

Standard E & E procedures were adhered to during the collection of all surface water samples. All surface water samples were packaged and shipped in accordance with U.S. EPA-required procedures.

Monitoring Well Sampling Procedures. Monitoring well samples (indicated as MW1 through MW4) were collected to determine whether TCL compounds and/or TAL analytes were present in groundwater in the vicinity of the site. All monitoring wells sampled were 2-inch diameter wells with a dedicated pumping system (Well Wizard) contained within the well casing. The wells were installed in October 1987 (Lewis et al. 1988). GCLI representatives purged each monitoring well of three to five times its standing volume and allowed each well to recharge prior to sampling.

Monitoring well 1 (designated by WMI as MWG122) was located approximately 150 feet northwest of the maintenance garage in the north-central portion of the site (see Figure 3-4 for locations of monitoring wells). Several attempts were made to purge this well of all water within reach of the integral pump before the required 3 1/2-gallon volume was obtained. The well was then allowed to recharge and a sample was obtained.

Monitoring well 2 (designated by WMI as MWG123) is located along the west boundary of the Green Valley Landfill site, approximately 100 feet northeast of soil sampling location S7.



SOURCE: Ecology and Environment, Inc. 1989; Waste Management, Inc. 1988.

SCALE
0 500 1000 1500 2000 FEET

FIGURE 3-4 MONITORING WELL SAMPLING LOCATIONS

Monitoring well 3 (designated by WMI as MWG125) is located approximately 1,200 feet east of the southwest corner of the site. The well was purged of seven gallons of standing water and allowed to recharge before a sample and matrix spike duplicate (MSD) were obtained.

Monitoring well 4 (designated by WMI as MWG129) is located approximately 900 feet north of the southeast corner of the site, adjacent to Greene Road.

FIT and GCLI representatives observed three dry monitoring wells along the south border of the Green Valley Landfill site. These wells were designated by WMI as MWG126, MWG127, and MWG128. According to geotechnical reports by EMCON (1973) and Patrick Engineering (1982), groundwater elevations are highest beneath the north and west areas of the site, so that groundwater flow in the shallow aquifer appears to be toward these monitoring wells and others located along Greene Road.

Monitoring well sampling procedures were videotaped and photographed by WMI and FPDDC representatives.

A distilled water field blank was prepared in accordance with U.S. EPA quality assurance/quality control (QA/QC) requirements. Due to the slow rate of groundwater recharge into the monitoring wells sampled, a duplicate sample was not obtained. However, FIT did collect a matrix spike duplicate along with sample MW3. All samples were filtered, packaged, and shipped in accordance with U.S. EPA-required procedures.

As directed by U.S. EPA, all soil, surface water, and monitoring well samples were analyzed under the U.S. EPA Contract Laboratory Program (CLP) for TCL compounds by S-Cubed of San Diego, California, and for TAL analytes by JTC Environmental Consultants of Rockville, Maryland.

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section includes results of chemical analysis of FIT-collected soil samples, surface water samples, and monitoring well samples for TCL compounds and TAL analytes.

4.2 RESULTS OF CHEMICAL ANALYSIS OF FIT-COLLECTED SAMPLES

Soil Sample Results. Chemical analysis of FIT-collected soil samples revealed substances from the following groups of TCL compounds and TAL analytes: polyaromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs), heavy metals, common soil constituents, and common laboratory artifacts (see Table 4-1 for complete soil sample chemical analysis results).

Surface Water Sample Results. Analysis of FIT-collected surface water samples revealed substances from the following groups of TCL compounds and TAL analytes: heavy metals, pesticides, and common soil constituents (see Table 4-2 for complete surface water sample chemical analysis results).

Monitoring Well Sample Results. Analysis of FIT-collected monitoring well samples revealed substances from the following groups of TCL compounds and TAL analytes: heavy metals, common soil constituents, and common laboratory artifacts (see Table 4-3 for complete monitoring well sample chemical analysis results).

U.S. EPA CLP quantitation/detection limits used in the analysis of soil, surface water, and monitoring well samples are provided in Appendix D.

Sample Collection Information				and Parameters			
Date	Time	CLP Organic Traffic Report Number	CLP Inorganic Traffic Report Number	Temperature (°C)	Specific Conductivity (µmhos/cm)	pH	Compound Detected
11/08/88	1155	RCR41	MEB064	10	1300	7.87	
11/08/88	1015	RCR42	MEB065	11	1300	7.92	
11/08/88	1015	RCR43	MEB066	11	1300	7.92	
11/09/88	0900	RCR19	MEB054	10	0	7.15	
Analyte Detected				(Values in µg/L)			
Pesticides/PCBs				Endosulfan I			
555	725	733	—	—	—	—	—
arsenic	5.28	—	—	—	—	—	—
barium	30.48	27.68	28.68	—	—	—	—
calcium	83,600	82,700	85,700	—	—	—	—
copper	—	—	26.3	—	—	—	—
iron	9417	1,240	1,220	98.78	—	—	—
lead	5.5	4.43MB	3.83MB	—	—	—	—
magnesium	34,400	34,600	35,300	—	—	—	—
manganese	32.3	39	39.7	—	—	—	—
mercury	.237	—	.237	.347	—	—	—
potassium	8,750	9,160	8,750	—	—	—	—
silver	15.73M	—	—	—	—	—	—
sodium	182,000	176,000	180,000	—	—	—	—
— Not detected.							

Table 4-2
RESULTS OF CHEMICAL ANALYSIS OF
PIT-COLLECTED SURFACE WATER SAMPLES

Table 4-2 (Cont.)

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
B	Value is real, but is above instrument DL and below CREL.	Value may be quantitative or semi-quantitative.
J	Value is above CREL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.

Source: Ecology and Environment, Inc. 1989.

Table 4-3
RESULTS OF CHEMICAL ANALYSIS OF
PIT-COLLECTED MONITORING WELL SAMPLES

Sample Collection Information and Parameters	Sample Number				
	NW1	NW2	NW3	NW4	Blank
Date	11/08/88	11/08/88	11/08/88	11/08/88	11/08/88
Time	1530	1505	1330	1015	1050
CLP Organic Traffic Report Number	ECP44	ECP45	ECP46	ECP47	ECP50
CLP Inorganic Traffic Report Number	MEBU67	MEBU68	MEBU69	MEBU70	MEBU73
Temperature (°C)	10	10	10	10	13
Specific Conductivity (µmhos/cm)	900	800	800	900	4
pH	7.17	7.25	6.65	6.05	5.64
<u>Compound Detected</u>					
(values in µg/L)					
<u>Volatile Organics</u>					
methylene chloride	—	—	—	7	—
<u>Analyte Detected</u>					
(values in µg/L)					
aluminum	—	280	—	—	—
arsenic	—	—	7.3B	—	—
barium	16.1B	19.5B	76.2B	28.5B	—
calcium	125,000	114,000	113,000	148,000	—
iron	1,020J	175J	2,450	914J	239J
lead	—	1.4B	—	—	—
magnesium	67,400	58,300	65,600	69,400	—
manganese	67.3	62.8	47.8	159	—
mercury	—	—	—	.23J	.34J
potassium	2,250B	2,050B	2,050B	3,270B	—
sodium	4,360B	6,420	8,220	6,320	—

— Not detected.

Table 4-3 (Cont.)

ANALYTE QUALITIES	DEFINITION	INTERPRETATION
B	Value is real, but is above Instrument DL and below CMDL.	Value may be quantitative or semi-quantitative.
J	Value is above CMDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.

Source: Ecology and Environment, Inc. 1989.

11-11-1961

[illegible]

Table 4-1 (cont.)

Sample Collection Information and Parameters	Sample Number									
	81	82	83	84	85	86	87	88	89	90
Depth	25.2	13.4	11.4	13.4	14.4	11.6	11.1	15.9	133	16.2
Salinity	16.35	7.719	6.32	10.68	7.89	9.32	9.25	9.25	8.68	11.62
Temp	56.3	50.5	12.2	15.7	15.2	22.4	18.5	22.7	22.7	23
DO	2.400	16.200	16.600	17.900	16.900	19.900	17.900	21.600	22.000	24.000
pH	15.8	16.3	15.1	20.3	15.3	13.4	12.9	17.3	71	26.2
Respiration	11.300	57.100	59.000	27.200	23.100	22.700	21.900	14.300	17.300	6.620
Surgeance	4.2	4.4	3.7	6.4	4.4	1.90	1.50	6.6	4.6	1.000
Surgeance	2.250	—	31.49	—	—	—	16.50	16.50	35.20	23.00
Water	20.4	15.4	19.7	20.1	18.8	26.3	24.1	20.5	35.7	26.2
Operation	1.700	1.300	1.700	1.200	1.520	1.650	1.340	1.520	1.750	1.500
Location	67200	—	57200	65200	66.500	65.000	65.000	—	72.000	71.000
Latitude	29	23.2	21.7	20.5	24.5	23.4	19.7	21.5	27.2	29.7
Longitude	175	161.4	161.3	161.2	161.8	161	161.7	161.7	161.5	161

Not detected.

Table 4-1 (Cont.)

COMPOUND QUALIFIERS

DEFINITION

J

Indicates an estimated value.

C

This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides 10 ng/μL in the final extract shall be confirmed by GC/MS.

ANALYTE QUALIFIERS

DEFINITION

N

Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.

+

Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.

R

Value is real, but is above instrument DL and below CRDL.

I

Value is above CRDL and is an estimated value because of a QC protocol.

W

Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.

Source: Ecology and Environment, Inc. 1989.

INTERPRETATION

Compound value may be semiquantitative.

Compound was confirmed by GC/MS and is quantitative.
Use pesticide/PCB listed values.

INTERPRETATION

Value may be quantitative or semi-quantitative.

Data value may be biased.

Value may be quantitative or semi-quantitative.
Value may be semiquantitative.

Value may be semiquantitative.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section discusses data and information that apply to potential migration pathways and targets of TCL compounds and/or TAL analytes that may be attributable to the Green Valley Landfill site.

The five migration pathways of concern discussed are groundwater, surface water, air, fire and explosion, and direct contact.

5.2 GROUNDWATER

TAL analytes were detected in monitoring wells, but do not appear to be attributable to the Green Valley Landfill site. Substances detected in well samples cannot be attributed to the site because the same TAL analytes detected in monitoring well samples were also detected at similar concentrations in the background soil sample and are commonly found in soils of this area (USGS 1984). No TCL compounds were detected in the monitoring well samples other than a low concentration of a common laboratory artifact, methylene chloride.

A potential does exist for TCL compounds and/or TAL analytes to migrate from the site to groundwater in the vicinity of the site. This potential is based on the following information:

- TCL compounds and TAL analytes have been detected in soil samples collected on-site;
- Although the site is clay-lined and the surface soils on-site are primarily clay material, TCL compounds and TAL

analytes were detected in drainage ditches on-site which lead to areas off-site that may not be clay-lined or possess similar surficial clay materials; and

- Three of the site's downgradient monitoring wells were observed to be dry, so that no samples could be obtained to reveal the chemical content of the groundwater passing beneath them.

The potential for migration of TCL compounds and/or TAL analytes from the site to groundwater is low, based on the following information:

- The site is clay-lined;
- The site contains a leachate collection system; and
- Monitoring wells surround the site, and samples are collected quarterly for chemical analysis.

The site and the area surrounding the site are underlain by glacial deposits of predominantly silty-clay till, with lenses and zones of outwash sand and gravel. Beneath the site, the glacial deposits extend from the surface to a depth of approximately 40 to 60 feet. Horizontally bedded Niagaran dolomite (Silurian age) approximately 400 feet thick underlies, and is hydraulically connected to, the glacial deposits above. Beneath the Niagaran dolomite, Maquoketa shale (Ordovician age) extends another 300 feet and forms a confining layer. The aquifer of concern is therefore made up of the glacial deposits and the Niagaran dolomite (EMCON Associates 1973).

Within the glacial deposits, the glacial till, made up predominantly of silty clay, offers little groundwater and is not considered a groundwater resource (Patrick Engineering 1982). However, zones of permeable sand and gravel tend to become more frequent with depth so that, near the dolomite interface, beyond a depth of about 45 feet, an apparently continuous layer of sand and gravel extends laterally beneath the site (EMCON Associates 1973).

According to the EMCON geotechnical report, groundwater beneath the site travels in two directions. Groundwater within the glacial sand and gravel layers tends to move toward the southeast, discharging into the East Branch of the Du Page River. Groundwater within the Niagaran dolomite tends to flow in a westerly direction (EMCON Associates 1973). The groundwater surface is located at a depth of approximately 25 feet.

Wells used for drinking water in the area are open to groundwater at depths from approximately 40 feet to approximately 395 feet (well logs representative of the area and on-site soil borehole logs supplied by Hydro-Search, Inc., are provided in Appendix E). Local wells draw water from the aquifer of concern within a 3-mile radius of the site and serve approximately 145,221 people.

This estimate includes those served by the municipal water systems of the communities of Lisle, Bolingbrook, Woodridge, Downers Grove, and Naperville--a combined population of 143,353 people (Illinois State Water Survey 1986). The remaining 1,868 people within 3 miles of the site are served by private wells. This estimate was obtained by counting residences outside of corporate boundaries on United States Geological Survey (USGS) topographic maps of the area (USGS 1962, 1963) and multiplying by the 1980 Census averages for Du Page and Will Counties of 2.92 and 3.07 persons per household, respectively (U.S. Bureau of the Census 1982).

Water from two wells located on-site is used only for equipment maintenance (Lewis et al. 1988). On-site drinking water is obtained from a private bottler.

5.3 SURFACE WATER

Surface water sample SW1, collected from the East Branch of the Du Page River, north of the Green Valley Landfill site, revealed no TCL compounds or TAL analytes. The duplicate of surface water sample SW2, collected from the river south of the site, contained the TCL compound Endosulfan I. A potential exists that this TCL compound could be attributable to the Green Valley Landfill site, based on the following information:

- Endosulfan I was detected on-site, in surface soil sample S4;
- The drainage ditch from which S4 was obtained leads to the northeast corner of the site, and then toward the river east of Greene Road;
- Endosulfan I was not detected in surface water sample SW1, collected upstream of the site; and
- Endosulfan I was not detected in any off-site soil samples.

A potential exists that other TCL compounds and TAL analytes could migrate from the Green Valley Landfill site to the East Branch of the Du Page River, based on the following information:

- Surface soil samples collected from drainage ditches on-site contained TCL compounds and TAL analytes;
- All drainage areas on-site connect with intermittent streams off-site, which lead into the Du Page River at locations both east and south of the site;
- Discharge of potentially contaminated groundwater beneath the site could occur because groundwater in the uppermost sand and gravel lenses moves laterally toward the river (EMCON Associates 1973).

Surface soil sample S1, collected from the west bank of the East Branch of the Du Page River, contained TCL compounds similar to those detected in on-site soil samples S4 and S9. However, the TCL compounds detected in soil sample S1 were present at significantly lower concentrations than those detected in on-site soil samples and cannot be attributed to migration from the Green Valley Landfill site, based on the following information:

- Sample S1 was collected upstream of the point at which the drainage path where S4 was collected enters the river;
- The area from which soil sample S1 was obtained receives drainage from a large area extending north of the Green Valley Landfill site for approximately 1/2 mile;
- A sewage treatment facility discharges effluent just upstream of where soil sample S1 was collected; and
- The area from which soil sample S1 was obtained is subject to seasonal flooding, and subsequent migration of contaminants from numerous potential sources located upstream could occur.

The East Branch of the Du Page River is the nearest surface water body to the site. It is located approximately 1,500 feet east of the site. The river flows from north to south, trending westward approximately 1 mile south of the site. The river is used primarily for recreation (Lewis et al. 1988).

5.4 AIR

A release of potential contaminants to the air was not documented during the SSI of the Green Valley Landfill site. During the reconnaissance inspection, FIT site-entry instruments (OVA 128, explosimeter, oxygen meter, hydrogen cyanide monitor, and radiation monitor) did not detect levels above background concentrations at the site (E & E 1987). In accordance with the U.S. EPA-approved work plan, further air monitoring was not conducted by FIT.

A potential exists for windblown contaminants to migrate off-site, based on the following information:

- TCL compounds and TAL analytes were detected in on-site surface soil samples; and

- Heavy equipment traffic on-site is conducive to dusty conditions.

5.5 FIRE AND EXPLOSION

According to James Simon, Deputy Fire Chief of the Lisle-Woodridge Fire Protection District, the Green Valley Landfill has experienced two fires in previous years (Simon 1989).

FIT observations and explosimeter readings indicated no apparent danger of fire and/or explosion at the site at the time of the SSI. However, a low potential for a fire and/or explosion to occur does exist due to the large amount of methane gas which is generated, vented, and burned daily at the site.

5.6 DIRECT CONTACT

According to federal, state, and local file information reviewed by FIT, as well as interviews with local officials, there is no documentation of an incident involving direct contact with TCL compounds and/or TAL analytes at the Green Valley Landfill site. However, the potential for direct contact does exist, based on the following information:

- TCL compounds and TAL analytes have been detected at the site; and
- Eighteen people work at the site and an undetermined number of vehicle operators haul waste to the site daily.

The population within a 1-mile radius of the site is approximately 2,293 persons. This estimate was obtained using a USGS topographic map of the area of the site (USGS 1973). Outside the Bolingbrook and Woodridge municipal limits, house counts were multiplied by the Du Page and Will County 1980 Census averages of 2.92 and 3.07 persons per household, respectively. Within the municipal limits of Bolingbrook and Woodridge, planimeter readings were used to determine the remainder of the population within the 1-mile radius.

6. REFERENCES

E & E, 1987, Quality Assurance Project Plan Region V FIT Conducted Site Inspections, Chicago, Illinois.

EMCON Associates, 1973, Geotechnical and Groundwater Study, Green Valley Forest Preserve Sanitary Landfill, Du Page County, Illinois, San Jose, California.

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IEPA, October 3, 1974, Permit Allowing Waste Management of Illinois, Inc., to Operate a Solid Waste Disposal Site in the Green Valley Forest Preserve, signed by Thomas P. Clark, Permit Section, Division of Land Pollution Control.

_____, January 31, 1984, Potential Hazardous Waste Site Preliminary Assessment, for the Green Valley Landfill, U.S. EPA ID: ILD060360898, by James K. Wiggins.

Illinois State Water Survey, 1986, Public Groundwater Supplies in Du Page County, Bulletin 60-32, Champaign, Illinois.

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Lewis, Francis R., Louis Bohlander, and Jerry Hartwig, November 7, 1988, WMI Engineer, Landfill Manager, and FPDDC Engineer, respectively, Green Valley Landfill site, Naperville, Illinois, interview, conducted by Melanie Nesterenko and Stanley Senger of E & E.

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Patrick Engineering, Inc., April 22, 1982, Geotechnical Recommendations for Design, Green Valley Landfill II, Du Page County, Illinois, Glen Ellyn, Illinois.

Simon, James, March 2, 1989, Deputy Fire Chief, Lisle-Woodridge Fire District, telephone conversation with Stanley Senger of E & E, regarding history of department's response to fires at Green Valley Landfill.

Sternard, Glenn, March 3, 1983, IEPA, Northern Region FOS, memorandum to division file, regarding meeting held on February 8, 1983, at the Green Valley Forest Preserve offices.

U.S. Bureau of the Census, 1982, 1980 Census of Population, General Population Characteristics, Illinois.

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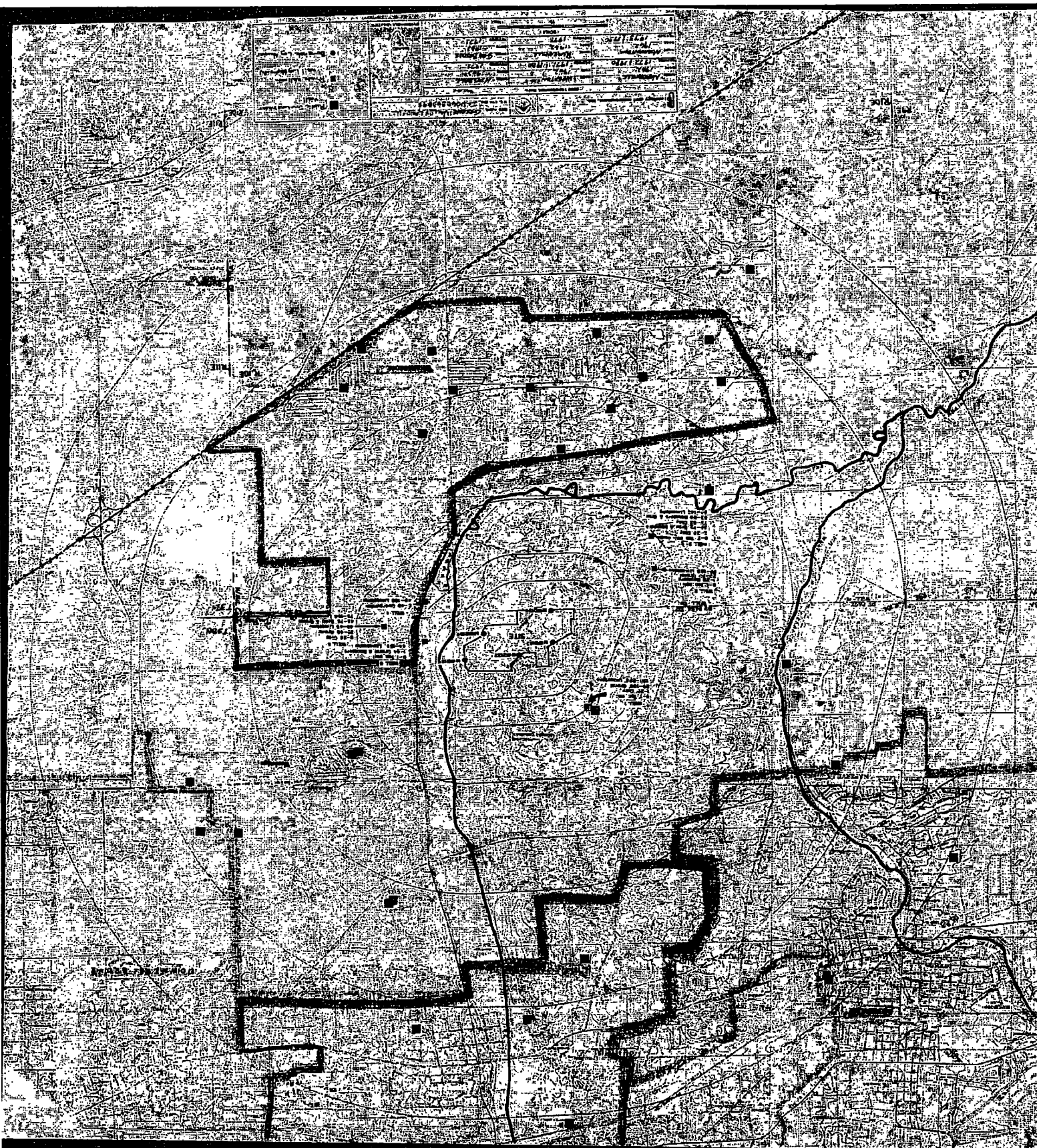
USGS, 1962, Naperville, photorevised 1972 and 1980; 1962, Wheaton, photorevised 1972 and 1980; 1963, Hinsdale, photorevised 1972; 1962, Normantown, photorevised 1973 and 1980; 1962, Romeoville, photorevised 1973; 1963, Sag Bridge, photorevised 1973, Illinois Quadrangles, 7.5 Minute Series: 1:24,000.

_____, 1984, Element Concentrations in Soils and Other Surficial
Materials of the Conterminous United States, professional paper
number 1270, U.S. Government Printing Office, Washington, D.C.

2272:2

APPENDIX A

SITE 4-MILE RADIUS MAP



APPENDIX B

U.S. EPA FORM 2070-13



Site Inspection Report



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER D060360898

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) GREEN VALLEY LANDFILL
02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 9S. 610 GREEN ROAD
03 CITY NAPERVILLE
04 STATE IL 05 ZIP CODE 60540 06 COUNTY DUPAGE
07 COUNTY CODE 043 08 CONG. DIST. 13
09 COORDINATES
LATITUDE 41° 42' 00" N LONGITUDE 88° 25' 00" W
10 TYPE OF OWNERSHIP (Check one)
☐ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☒ F. OTHER FOREST PRESERVE DISTRICT of DUPAGE County

III. INSPECTION INFORMATION

01 DATE OF INSPECTION 11/8/88
MONTH DAY YEAR
02 SITE STATUS
☒ ACTIVE
☐ INACTIVE
03 YEARS OF OPERATION 1974 Presently Active
BEGINNING YEAR ENDING YEAR
04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR Ecology & Environment, Inc. (Name of firm)
☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR (Name of firm) ☐ G. OTHER (Specify)

06 CHIEF INSPECTOR	08 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
MELANIE NESTERENKO	BIOLOGIST	E & E, INC./FIT	(312) 663-9415
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
STANLEY SENDER	WATER RESOURCE MANAGER	E & E/FIT	() SAME
KURT SIMS	EARTH SCIENTIST	E & E/FIT	() SAME
RONNIE GALTMORE	TECHNICIAN	E & E/FIT	() SAME
DAN SULLIVAN	CHEMICAL ENGINEER	E & E/FIT	() SAME
RON SHORT	BIOLOGIST	E & E/FIT	() SAME
MARLOU MARTIN	ENVIRONMENTAL SCIENTIST	E & E/FIT	() SAME
13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS WASTE MGT. of North Am., Inc., 1300 Willow Rd. NORTH BROSOK, IL	16 TELEPHONE NO.
Bob Lewis	ENGINEER		(312) 498-0883
Louie Bohlander	LANDFILL GENERAL MGR.	GREEN VALLEY LANDFILL 9S. 610 GREENE ROAD NAPERVILLE, IL 60540	(812) 983-8770
Jerry Hartwig	ENGINEER, FOREST PRESERVE DIST.	Forest Preserve Dist. of DuPage Co. P.O. Box 2894, 185 Spring Ave. GLEN ELLYN, IL 60138	(312) 790-4906
			()
			()
			()

17 ACCESS GAINED BY (Check one)
☒ PERMISSION
☐ WARRANT
18 TIME OF INSPECTION 11/8/88 0830
11/9/88 0830
19 WEATHER CONDITIONS
Partly Cloudy, high @ 50°F, light winds out of west 5-10 mph.
Partly Cloudy, @ 45°F, S.W. winds 5-10 mph, light rain after 1130 hours.

IV. INFORMATION AVAILABLE FROM

01 CONTACT Tom Crause
02 OF (Agency/Organization) Illinois EPA
03 TELEPHONE NO. (217) 782-7848
04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM STANLEY SENDER
05 AGENCY E & E/FIT USEPA
06 ORGANIZATION Ecol. & Env., Inc. FIT
07 TELEPHONE NO. (312) 663-9415
08 DATE 01/12/89
MONTH DAY YEAR



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01. PHYSICAL STATES (Check all that apply) <input type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER, FINES <input type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER _____ (Specify) <input type="checkbox"/> E SLURRY <input type="checkbox"/> F LIQUID <input type="checkbox"/> G GAS	02. WASTE QUANTITY AT SITE (Measure of waste quantity must be independent) TONS _____ CUBIC YARDS <u>10,500/day</u> NO. OF DRUMS _____	03. WASTE CHARACTERISTICS (Check all that apply) <input type="checkbox"/> A TOXIC <input type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE
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III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	—	Gr. V. Landfill received an undetermined
OLW	OILY WASTE			volume of sludge from Chicago Metropol.
SOL	SOLVENTS			sewerage district from 1974-'79. After
PSD	PESTICIDES	UNKNOWN	—	1979 this practice stopped; however
OOC	OTHER ORGANIC CHEMICALS	UNKNOWN	—	septic pumpings from households in
IOC	INORGANIC CHEMICALS			DuPage Co. were received until 1985.
ACD	ACIDS			Again, no volume determined.
BAS	BASES			
MES	HEAVY METALS	UNKNOWN	—	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Aluminum (CSC)	7429-90-5	Monitoring Well Sample MW2	280	UG/L
MES	Arsenic	7440-38-2	" " " MW3	7.3B	UG/L
MES	Barium (CSC)	7440-39-3	" " " MW3	76.2B	UG/L
MES	Calcium (CSC)	7440-70-2	" " " MW4	148,000	UG/L
MES	Iron (CSC)	7439-89-6	" " " MW3	+ 2450	UG/L
MES	Magnesium (CSC)	7439-95-4	" " " MW4	69,400	UG/L
MES	Manganese	7439-96-5	" " " MW4	159	UG/L
MES	Mercury	7439-97-6	" " " MW4	+ .235	UG/L
MES	Potassium (CSC)	7440-09-7	" " " MW4	3270B	UG/L
MES	Sodium (CSC)	7440-23-5	" " " MW3	8220	UG/L
MES	Aluminum (CSC)	7429-90-5	Soil Sample S8	+ 14,100	Mg/Kg
MES	Antimony	7440-36-0	Soil Sample S9	+ 24JN	Mg/Kg
MES	Arsenic	7440-38-2	" " S6	+ 11.4JF	Mg/Kg
MES	Barium (CSC)	7440-39-3	" " S9	+ 112	Mg/Kg
MES	Cadmium	7440-43-9	" " S9	+ 13.3	Mg/Kg
MES	Calcium (CSC)	7440-70-2	" " S3	+ 69/100	Mg/Kg

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	None		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., State files, sample analysis, response)

E+E, Inc. Site Inspection, November 8 & 9, 1988; Site Interview November 7, 1988.
E+E, Inc./FIT Files, Region II.

* Continued from Part II, Section IV.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)					
01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/ DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Chromium	7440-47-3	Soil Sample S9	+ 133	Mg/Kg
MES	Cobalt	7440-48-4	" " S4	++ 10.6 B	Mg/Kg
MES	Copper	7440-50-8	" " S9	+ 99.5	Mg/Kg
MES	Iron (CSC)	7439-89-6	" " S10	+ 26,300	Mg/Kg
MES	Lead	7439-92-1	" " S9	+ 71	Mg/Kg
MES	Magnesium (CSC)	7439-95-4	" " S3	+ 39,800	Mg/Kg
MES	Manganese	7439-96-5	" " S4	++ 634	Mg/Kg
MES	Mercury	7439-97-6	" " S9	+ .57 JN	Mg/Kg
MES	Nickel	7440-02-0	" " S9	+ 35.7	Mg/Kg
MES	Potassium (CSC)	7440-09-7	" " S6	+ 26.0	Mg/Kg
MES	Thallium	7440-28-0	" " S5	+ .86 JWNB	Mg/Kg
MES	Vanadium	7440-62-2	" " S8	+ 31.5	Mg/Kg
MES	Zinc	7440-66-6	" " S9	+ 315	Mg/Kg
OCC	acenaphthene	83-32-9	" " S4	100 J	Ug/Kg
OCC	Fluorene	86-73-7	" " S4	110 J	Ug/Kg
OCC	Phenanthrene	85-01-8	" " S4	1,700	Ug/Kg
OCC	Anthracene	120-12-7	" " S4	330 J	Ug/Kg
OCC	fluoranthene	206-44-0	" " S4	3200	Ug/Kg
OCC	Pyrene	129-80-0	" " S4	2600	Ug/Kg
OCC	benzo(a)anthracene	56-55-3	" " S4	1300	Ug/Kg
OCC	Chrysene	218-01-9	" " S4	1,500	Ug/Kg
OCC	bis(2-ethylhexyl) phthalate	119-81-7	" " S9	+ 160 J	Ug/Kg
OCC	benzo(b)fluoranthene	205-99-2	" " S4	1500	Ug/Kg
OCC	benzo(k)fluoranthene	207-08-9	" " S4	1100	Ug/Kg
OCC	benzo(a)pyrene	50-32-8	" " S4	1400	Ug/Kg
OCC	indeno(1,2,3-cd)pyrene	193-39-2	" " S4	790	Ug/Kg
OCC	dibenzo(a,h)anthracene	53-70-3	" " S4	280 J	Ug/Kg
OCC	benzo(ghi)perylene	191-24-2	" " S4	820	Ug/Kg
OCC	Arochlor 1260	11096-82-5	" " S9	405 C	Ug/Kg
PSD	Heptachlor	76-44-8	" " S8	5.8 C J	Ug/Kg
PSD	Aldrin	309-00-2	" " S8	2.5 C J	Ug/Kg
PSD	Heptachlor epoxide	1024-57-3	" " S8	1.2 C J	Ug/Kg
PSD	Endosulfan I	959-98-8	" " S4	20 C	Ug/Kg
PSD	Dieldrin	60-57-1	" " S9	110 C	Ug/Kg
PSD	4,4'-DDE	72-55-9	" " S9	25 C	Ug/Kg
NOTES: Values listed reflect the highest concentration detected of each Compound/Analyte.					
+ Denotes compound/analyte was also detected in blank/Background sample.					
++ Denotes highest concentration was found in blank/background sample.					
(CSC) Denotes analyte which is a common soil constituent					



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D060360898

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 <input checked="" type="checkbox"/> A. GROUNDWATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: <u>145,221</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION Monitoring well water sample results indicate the presence of analytes commonly found in soils of this region. Soil sample results, however, indicate hazardous compounds and analytes exist in on-site soils at concentrations well above those levels found in the background sample. A low potential exists for these compounds and analytes to migrate into the shallow glacially deposited material and continue on into the deeper dolomite aquifer to which it is hydraulically connected.
01 <input type="checkbox"/> B. SURFACE WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: <u>UNKNOWN</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION The East Branch of the DuPage River is not used as a drinking water source, but is used for recreational fishing and canoeing. Although TCL compounds and TML analytes were found in on-site soil samples, the probability that these contaminants might reach the river is low. FIT samples revealed no indication of surface water contamination attributable to the Green Valley LF site.
01 <input type="checkbox"/> C. CONTAMINATION OF AIR 03 POPULATION POTENTIALLY AFFECTED: <u>80,778</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION None detected or observed at time of investigation; however, methane gas generated within the landfill is burned via a utility flare northwest of the site. Should this flare fail, methane gas could be vented to the surrounding local atmosphere. Permit requirements state the flare is to be closed down if the flame cannot be maintained or relighted.
01 <input type="checkbox"/> D. FIRE/EXPLOSIVE CONDITIONS 03 POPULATION POTENTIALLY AFFECTED: <u>25,687</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION None observed by FIT at the time of the inspection. Lisle - Woodridge Fire District Files indicate two fires occurred on-site in previous years. An explosive condition may arise if the methane utility flare were to fail and release methane gas to the surrounding local atmosphere.
01 <input type="checkbox"/> E. DIRECT CONTACT (1-mile) 03 POPULATION POTENTIALLY AFFECTED: <u>2298</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION Eighteen employees at the landfill could potentially come into direct contact with soils on-site which have been shown to contain hazardous compounds and analytes. FIT obtained these contaminated samples from 0-12 inches of the surface of the soil. All water used for drinking on-site is obtained off-site (bottled water). Property is fenced with controlled gate.
01 <input type="checkbox"/> F. CONTAMINATION OF SOIL 03 AREA POTENTIALLY AFFECTED: <u>~100 Acres</u>	02 <input type="checkbox"/> OBSERVED (DATE: <u>11-9-88</u>) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION Soil contamination on-site has been documented through testing. Hazardous compounds and analytes were detected in samples obtained from 0-12 inches deep. These samples were gathered primarily in low lying areas near the bottom of the exterior site slopes of the landfill. Samples gathered from the east half of the site showed greatest contamination.
01 <input type="checkbox"/> G. DRINKING WATER CONTAMINATION 03 POPULATION POTENTIALLY AFFECTED: <u>145,221</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION On-site Hazardous compounds and analytes exist in the soil as indicated in Part 2. The geology of the area indicates a low potential for these compounds and analytes to migrate to area private and municipal wells drawing from the dolomite aquifer. FIT collected no drinking water samples from the area. See (A) above.
01 <input type="checkbox"/> H. WORKER EXPOSURE/INJURY 03 WORKERS POTENTIALLY AFFECTED: <u>18</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION No record of worker injury or hazardous chemical exposure exists. Hazardous compounds and/or analytes have been shown to exist in soils on-site. Since water for drinking is from an off-site source, ingestion of potentially contaminated groundwater is not likely. Dermal contact and inhalation of these contaminated soils is possible if dusty conditions exist.
01 <input type="checkbox"/> I. POPULATION EXPOSURE/INJURY 03 POPULATION POTENTIALLY AFFECTED: <u>145,221</u>	02 <input type="checkbox"/> OBSERVED (DATE: _____) <input type="checkbox"/> POTENTIAL <input type="checkbox"/> ALLEGED 04 NARRATIVE DESCRIPTION Area residents obtain drinking water from the Silurian dolomite formation which underlies and is hydraulically connected to the shallow glacially deposited material beneath the landfill. (See (A) and (E) above).



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D06036089B

II. HAZARDOUS CONDITIONS AND INCIDENTS (continued)

01 ☒ J. DAMAGE TO FLORA

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

A low potential exists due to the presence of contaminants in the soil.
(See summary data sheets).

01 ☒ K. DAMAGE TO FAUNA

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION (include names of species)

The potential exist due to the presence of contaminants in the soil. (See Summary data sheets). FIT observed numerous raccoon and deer tracks around the ditch and fence areas surrounding the site. Two deer were observed fleeing the site's southern fence.

01 ☒ L. CONTAMINATION OF FOOD CHAIN

02 ☐ OBSERVED (DATE: _____)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

A low potential exists due to the presence of contaminants in on-site soils
(See K above).

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☒ ALLEGED

03 POPULATION POTENTIALLY AFFECTED

145,221
04 NARRATIVE DESCRIPTION According to I.E.P.A. File Memorandum dated 09-17-80 and 03-03-83, large amounts of Chicago M.S.D. Sewage sludge were dried and stored in drying beds on-site. FIT obtained soil sample S9 from nearby these beds. Contamination of the soil here is evident but the containment offered here is not known.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☒ ALLEGED

04 NARRATIVE DESCRIPTION

In 1982 a complaint was filed stating that silt carried by surface water runoff had been deposited on the property south of the landfill. During this inspection it was noted that the sediment control structure located on the southwest corner of the site was functioning properly and no sediment problems were observed on the property adjoining the landfill in this area.

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or observed.

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING

02 ☐ OBSERVED (DATE: _____)

☐ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

None documented or observed.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL OR ALLEGED HAZARDS

According to I.E.P.A. Potential Hazardous Waste Site Preliminary Assessment dated 01/31/87, the site had allegedly received 100 drums of paint and solvents prior to that date under state permit. Other than the contamination observed in soil samples obtained by FIT, no other hazards were noted by FIT during the SSI.

III. TOTAL POPULATION POTENTIALLY AFFECTED: ~ 145,221

IV. COMMENTS

F.I.T. Site inspection was attended and video taped by Green Valley Landfill/Waste Mgt. and Forest Preserve District of Du Page County representatives.

V. SOURCES OF INFORMATION (cite specific references, e.g., state files, sample analyses, reports)

E!E, Inc. Site Interview and Inspection, November 7, 8 and 9, 1988.

E!E, Inc./FIT Files, Region I.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

L IDENTIFICATION
01 STATE 02 SITE NUMBER
IL D 060360898

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
<input type="checkbox"/> A. NPDES				
<input type="checkbox"/> B. UIC				
<input checked="" type="checkbox"/> C. AIR I EPA	043803AAI	12-29-87	01-31-90	I EPA/DARC Gas Utility Flare Permit
<input type="checkbox"/> D. RCRA				
<input type="checkbox"/> E. RCRA INTERIM STATUS				
<input type="checkbox"/> F. SPCC PLAN				
<input checked="" type="checkbox"/> G. STATE (Specify) I EPA	1994-30-DE and OP	10-3-74	None	Operations Permit
<input type="checkbox"/> H. LOCAL (Specify)				
<input checked="" type="checkbox"/> I. OTHER (Specify) State I EPA	1984-15-SP	08-15-84	None	Supplemental Permit for Expansion
<input type="checkbox"/> J. NONE				from 200 to 234.74 acres.

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE GA = gallon CY = Cubic Yards	04 TREATMENT (Check all that apply)	05 OTHER
<input type="checkbox"/> A. SURFACE IMPOUNDMENT			<input type="checkbox"/> A. INCINERATION	<input checked="" type="checkbox"/> A. BUILDINGS ON SITE 4 total: Ticket office, garage, 2 temporary trailers.
<input type="checkbox"/> B. PILES			<input type="checkbox"/> B. UNDERGROUND INJECTION	
<input type="checkbox"/> C. DRUMS, ABOVE GROUND			<input type="checkbox"/> C. CHEMICAL/PHYSICAL	06 AREA OF SITE 234.74 acres
<input checked="" type="checkbox"/> D. TANK, ABOVE GROUND	Storage tanks (See * below)		<input type="checkbox"/> D. BIOLOGICAL	
<input checked="" type="checkbox"/> E. TANK, BELOW GROUND	10,000	GA (Diesel fuel)	<input type="checkbox"/> E. WASTE OIL PROCESSING	
<input checked="" type="checkbox"/> F. LANDFILL	12,500,000	CY	<input type="checkbox"/> F. SOLVENT RECOVERY	
<input type="checkbox"/> G. LANDFARM			<input type="checkbox"/> G. OTHER RECYCLING/RECOVERY	
<input type="checkbox"/> H. OPEN DUMP			<input type="checkbox"/> H. OTHER (Specify)	
<input type="checkbox"/> I. OTHER (Specify)				

07 COMMENTS

G. Valley Landfill receives putrescible household wastes from DuPage Co. and elsewhere at a rate of @19,500 cubic yards/day. The expected closure date is in 1993 with plans for the site to eventually become a ski hill. Leachate/waste containment is provided by a combination in situ/recompacted clay liner. Leachate volume gathered via the leachate collection system is estimated at 5000 gallons/quarter, with maximum generation to date of @15,000 gal./month. Leachate and waste machinery oils generated at the landfill are shipped to CTR in Calumet City, IL. for disposal.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)
<input checked="" type="checkbox"/> A. ADEQUATE, SECURE <input type="checkbox"/> B. MODERATE <input type="checkbox"/> C. INADEQUATE, POOR <input type="checkbox"/> D. INSECURE, UNSOUND, DANGEROUS
02 DESCRIPTION OF DRUMS, Diking, LINERS, BARRIERS, ETC. Leachate/waste containment is provided by a combination in situ/recompacted clay liner with bottom and side walls a minimum of ten feet thick with maximum hydraulic conductivity of 1×10^{-7} cm/sec and minimum of 95% ASTM D698 density. Use of daily cover of waste is required. Leachate collection and methane removal systems remove liquids and methane. Leachate is disposed of off-site, methane is burned via a permitted utility flare on-site. A sediment control lagoon exists on the south west end of the landfill. Final cover requirement is 4 feet of clay.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
02 COMMENTS The landfill is entirely fenced with a camera system at the front gate and security alarms hooked to the police station. FPDPC rangers also routinely patrol the area of the site.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. data files, sample analysis, reports)

Above ground Tanks (Storage) 2, gasoline; 350 GA, 500 GA 2, oil; 500 GA each 2, oil; 275 GA each 2, oil; 650 GA, 800 GA	Sources: E & E, Inc. / FIT inspection; Interview, 11/7, 8, 9/88 E & E, Inc. Files (FIT), Region I.
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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY
(Check as applicable)

SURFACE WELL
COMMUNITY A ☐ B ☒
NON-COMMUNITY C ☐ D ☒

02 STATUS

ENDANGERED AFFECTED MONITORED
A ☐ B ☐ C ☒
D ☐ E ☐ F ☐

03 DISTANCE TO SITE

A. 0.75 (mi)
B. 0.10 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING
(Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION
(No other water sources available)
☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION
(Ground water sources available)
☐ D. NOT USED, UNUSABLE

02 POPULATION SERVED BY GROUND WATER ~145,221

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.10 (mi)

04 DEPTH TO GROUNDWATER

~25 (ft)

05 DIRECTION OF GROUNDWATER FLOW

South east

06 DEPTH TO AQUIFER
OF CONCERN

~25 (ft)

07 POTENTIAL YIELD
OF AQUIFER

7.6 X 10⁶ (gpd)

08 BOLE SOURCE AQUIFER

☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings) The following municipal wells exist within 3 miles of the landfill: Woodridge #1 through #6; Downers Grove #14; Bolingbrook #1 through #22, #14; Lisle #5; and Naperville #8, #20 and #22. Of the Bolingbrook wells, three are not used for drinking water and four others exist as emergency sources. Naperville #8 is also used as an emergency source. Several private wells exist in the vicinity of the landfill as well. Private or public, all wells tap water from the Niagara dolomite aquifer of Silurian age except for Naperville #20, which is much deeper.

10 RECHARGE AREA

☒ YES
☐ NO

COMMENTS Seasonal rain and snow recharge the aquifer in this area.

11 DISCHARGE AREA

☒ YES
☐ NO

COMMENTS Within 1500 ft. East of the landfill flows the East Branch of the DuPage River which is considered a discharge zone for the shallowly deposited sand and gravel.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION, DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:

East Branch of DuPage River

AFFECTED

DISTANCE TO SITE

(500 ft)

~0.28 (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE
A. ~2298
NO. OF PERSONS

TWO (2) MILES OF SITE
B. ~25,687
NO. OF PERSONS

THREE (3) MILES OF SITE
C. ~55,604
NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION

0.14 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

~7364

04 DISTANCE TO NEAREST OFF-SITE BUILDING

0.14 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Within one mile of the site, the area is rather sparsely populated. Beyond one mile, however, the population increases sharply so that, within four miles, approximately 80,798 people reside. Single and multi-family residences, commercial, and industrial zones exist in the vicinity of the landfill. The landfill itself is surrounded by forest preserve to the north, east and west, and by farm fields to the south. When finished it shall lie about 1000 feet west of the East Branch of the DuPage River. Currently it is about 1500 feet west of that river. Municipal water wells within 3 miles serve about 143,353 people; 1668 more on private wells.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

IDENTIFICATION

01 STATE 02 SITE NUMBER

IL DC60360898

VI ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-8} - 10^{-6}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec
(See also Part 4, IX, C. -- Liner description).

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE
(Less than 10^{-8} cm/sec)
☐ B. RELATIVELY IMPERMEABLE
($10^{-8} - 10^{-6}$ cm/sec)
☐ C. RELATIVELY PERMEABLE
($10^{-6} - 10^{-4}$ cm/sec)
☐ D. VERY PERMEABLE
(Greater than 10^{-4} cm/sec)

03 DEPTH TO BEDROCK

40-60 (ft)

04 DEPTH OF CONTAMINATED SOIL ZONE

Unknown (ft)

05 SOIL pH

Unknown

06 NET PRECIPITATION

3 inches (in)

07 ONE YEAR 24 HOUR RAINFALL

2.4 (in)

08 SLOPE
SITE SLOPE

25-28%

DIRECTION OF SITE SLOPE

South west and
South east

TERRAIN AVERAGE SLOPE

1 to 8%

09 FLOOD POTENTIAL

SITE IS IN Unknown YEAR FLOODPLAIN

10

☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY
N/A

11 DISTANCE TO WETLANDS (if any adjacent)

ESTUARINE

A. — (mi)

OTHER

B. 0.6 (mi)

12 DISTANCE TO CRITICAL HABITAT (if endangered species)

Unknown (mi)

ENDANGERED SPECIES: II

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL

A. 1.0 (mi)

RESIDENTIAL AREAS; NATIONAL/STATE PARKS,
FORESTS, OR WILDLIFE RESERVES.
(Within Forest Preserve District
of Du Page Co.)

B. 0.6 (mi)

AGRICULTURAL LANDS
PRIME AG LAND AG LAND

C. — (mi) D. < 100 feet

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

SEE ATTACHED 4 MILE RADIUS MAP, Appendix A.

VII SOURCES OF INFORMATION (For specific references, e.g., data base, sample analysis, reports)

E&E, Inc. Site Interview and Inspection Nov. 7, 8, 9, 1988.

E&E Inc./E.I.T. FILES, Region I.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE: IL 02 SITE NUMBER: D060360898

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	4 on-site monitoring wells	S-cubed TCL Compounds: San Diego, CA 92121 JTC Environmental Consultants TAL Analytes: Rockville, MD 20850	ON-FILE
SURFACE WATER	2 off-site, DuPage River	S-cubed TCL Compounds: San Diego, CA 92121 JTC Env. Consultants TAL Analytes: Rockville, MD 20850	"
WASTE			"
AIR			
RUNOFF			
SPILL			
SOIL	10 total: 7 on-site plus background	S-cubed TCL Compounds: San Diego, CA 92121 JTC Environmental Consultants TAL Analytes: Rockville, MD 20850	ON FILE
VEGETATION (soil)	2 off-site		" "
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Radiation Mini Alert	No readings greater than background.
OVA 128	No readings greater than background.
Explosimeter	No readings greater than background.
Oxygen Meter	No deviation above or below background.

IV. PHOTOGRAPHS AND MAPS

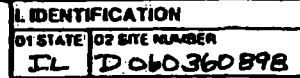
01 TYPE: <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> AERIAL	02 IN CUSTODY OF: Ecology & Environment, Inc., Chicago, IL 60604 <small>(Name of organization or individual)</small>
03 MAPS: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	04 LOCATION OF MAPS: Ecology & Environment, Inc., Chicago, IL 60604

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

FIT tried to obtain water samples from five of the downgradient monitoring wells: three of them were dry. Dry wells included monitoring wells # G126, #G127 and #G128, all located along the southern-most boundary of the landfill. Samples were obtained from downgradient wells #G125 (sample # MW3, plus MSD) and #G129 (sample # MW4), with no attempt to retrieve samples from wells #G130 or #G131. Upgradient wells sampled include #G122 (sample # MW1) and #G123 (sample # MW2).

VI. SOURCES OF INFORMATION (Can specify: references, e.g., State Rep. Sample analysis, reports)

E & E, Inc. Site Interview: Inspection, Nov. 7, 8, 9, 1988.
E & E, Inc. / FIT FILES, Region V.

EPA FORM 2070-13 (7-81)



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D 060360898

I. CURRENT OPERATOR (Provide if different from owner)				OPERATOR'S PARENT COMPANY (if applicable)			
01 NAME WASTE MGT. of ILLINOIS, Division of Waste Mgt. of N. America		02 D+B NUMBER		10 NAME Waste Mgt. of North America		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 1 Westbrook Center		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.) 3003 Butterfield Road		13 SIC CODE	
05 CITY Westchester		06 STATE IL	07 ZIP CODE 60153	14 CITY Oakbrook		15 STATE IL	16 ZIP CODE 60521
08 YEARS OF OPERATION 1974-present		09 NAME OF OWNER Forest Preserve District of DuPage County					
II. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)				PREVIOUS OPERATORS' PARENT COMPANIES (if applicable)			
01 NAME None		02 D+B NUMBER		10 NAME N/A		11 D+B NUMBER --	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
01 NAME		02 D+B NUMBER		10 NAME		11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE	
05 CITY		06 STATE	07 ZIP CODE	14 CITY		15 STATE	16 ZIP CODE
08 YEARS OF OPERATION		09 NAME OF OWNER DURING THIS PERIOD					
IV. SOURCES OF INFORMATION (Cite specific references, e.g., State Reg., sample analysis, reports)							
E&E, Inc. Site Interview and Inspection, Nov. 7 th , 8 th ; 9 th , 1988. E&E/FIT FILES, Region II.							



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D 060360898

II. ON-SITE GENERATOR

01 NAME N/A	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME Chicago Metropolitan Sewage Dist.	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 100 East Erie	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY Chicago	06 STATE IL	05 CITY	06 STATE
07 ZIP CODE 60611		07 ZIP CODE	
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME No information available in FIT Files.	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE 07 ZIP CODE	05 CITY	06 STATE 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, company analysis, reports)

E&E, Inc. Site Inspection & Interview, Nov. 7, 8, 9, 1988.

E&E, Inc. / FIT FILES, Region V.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

IL IDENTIFICATION

01 STATE 02 SITE NUMBER

IL D060360898

II. PAST RESPONSE ACTIVITIES

01 <input type="checkbox"/> A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> H. ON SITE BURIAL 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> L. ENCAPSULATION 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> N. CUTOFF WALLS 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II. PAST RESPONSE ACTIVITIES (Continued)

01 <input type="checkbox"/> R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> S. CAPPING/COVERING 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> T. BULK TANKAGE REPAIRED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> V. BOTTOM SEALED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> W. GAS CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> X. FIRE CONTROL 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> Z. AREA EVACUATED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> 2. POPULATION RELOCATED 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		
01 <input type="checkbox"/> 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE	03 AGENCY
N/A		

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

E/E / Est. Site Inspection / Interview, Nov. 7-9, 1988
FIT FILES, Region V.



POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

L IDENTIFICATION

01 STATE 02 SITE NUMBER
IL D060360898

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

According to Cliff Gould of IEPA, the Green Valley Landfill is inspected twice per month by Du Page County. Du Page County has been delegated the authority to perform these inspections by the IEPA.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state law, sample analysis, reports)

EPA/FIT Site Inspection/Interview, Nov. 7th, 8th, 9th, 1988
FIT FILES, Region V.

APPENDIX C
FIT SITE PHOTOGRAPHS

NOTE: The following photographic log is not complete due to camera problems encountered during the Green Valley Landfill site inspection.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 1 OF 20

U.S. EPA ID: ILD060360898

DOI: F05-8802-035

PAN: FL0254SA

DATE: > Nov. 8, 1988

TIME: > 0950

DIRECTION OF
PHOTOGRAPH:

> Southwest

WEATHER
CONDITIONS:

> Pky, cldy, high 50%

> Light west to east
> winds 5-10 mph

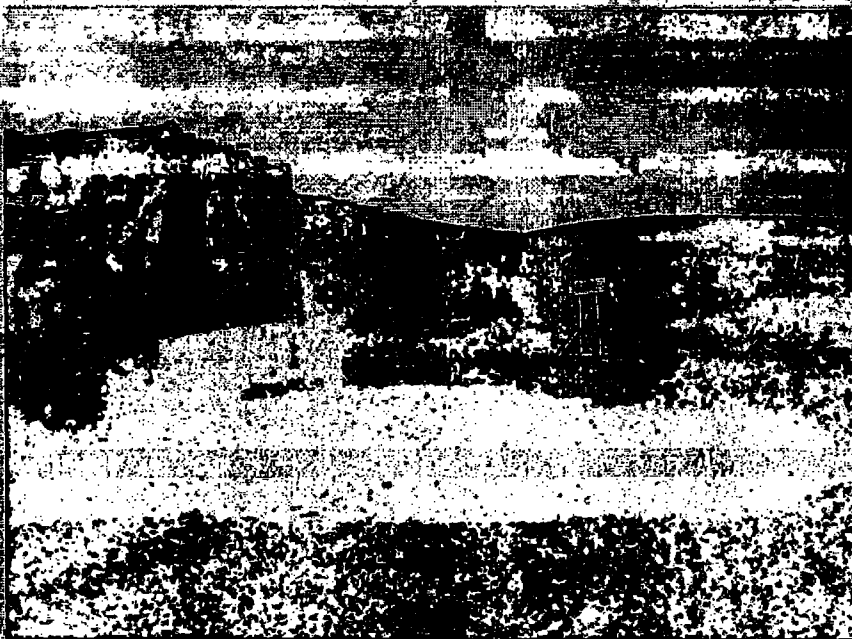
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> Not Applicable (NA)



DESCRIPTION: > Road leading to active fill area. Photo taken where

> road leading to active fill area splits from north perimeter
road. Disposal truck is travelling toward landfill active area.

DATE: > Nov. 8, 1988

TIME: > 0955

DIRECTION OF
PHOTOGRAPH:

> Southwest

WEATHER
CONDITIONS:

> Pky, cldy, high 50%

> Light west to east
> winds 5-10 mph

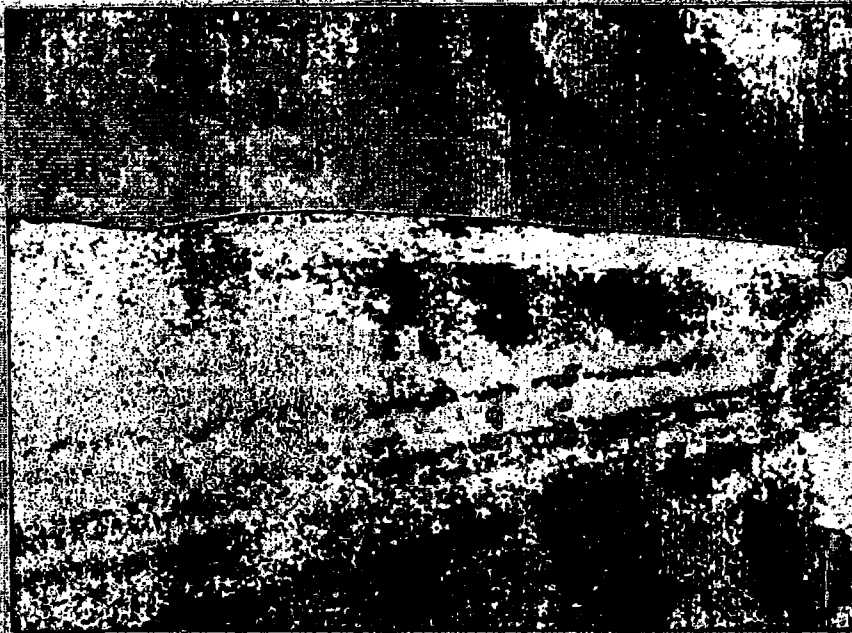
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo taken from north perimeter road showing north slope

> of previously filled area and grassy vegetation.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 2 OF 20

U.S. EPA ID: ILD060360898

TOD: F05-P802-035

PAR: F0625454

DATE: > Nov. 8, 1988

TIME: > 0955

DIRECTION OF
PHOTOGRAPH:
> WEST

WEATHER
CONDITIONS:
> Pky. cly, high @ 50°F
> Light west → east
> winds 5-10 mph

PHOTOGRAPHED BY:
> M. Martin

SAMPLE ID
(if applicable):
> N/A



DESCRIPTION: > Photo taken along northern perimeter road showing
> Forest Preserve District of DuPage County's wooded area north of
> landfill and drainage ditch north of site.

DATE: > Nov. 8, 1988

TIME: > 10:01

DIRECTION OF
PHOTOGRAPH:
> Northwest

WEATHER
CONDITIONS:
> Pky. cly, high 50°F
> Light west → east
> winds 5-10 mph

PHOTOGRAPHED BY:
> M. Martin

SAMPLE ID
(if applicable):
> N/A



DESCRIPTION: > Photo of fenced utility flame located along northern
> perimeter of site.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 3 OF 20

U.S. EPA ID: TLDO60360898

DOI: F05-P802-035

PAID: FD-025/SA

DATE: > Nov. 8, 1988

TIME: > 1002

DIRECTION OF
PHOTOGRAPH:

> West

WEATHER

CONDITIONS:

> Pky. Cldy, hgt. 050°F

> Light West - east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > photo of fenced landfill gas condensation/loading station
> located along north perimeter road of site. Landfill north slope
and methane gas vent in left portion of photo.

DATE: > Nov. 8, 1988

TIME: > 1005

DIRECTION OF
PHOTOGRAPH:

> East

WEATHER

CONDITIONS:

> Pky. Cldy, hgt. 50°F

> Light West - east

> Winds 5-10 mph

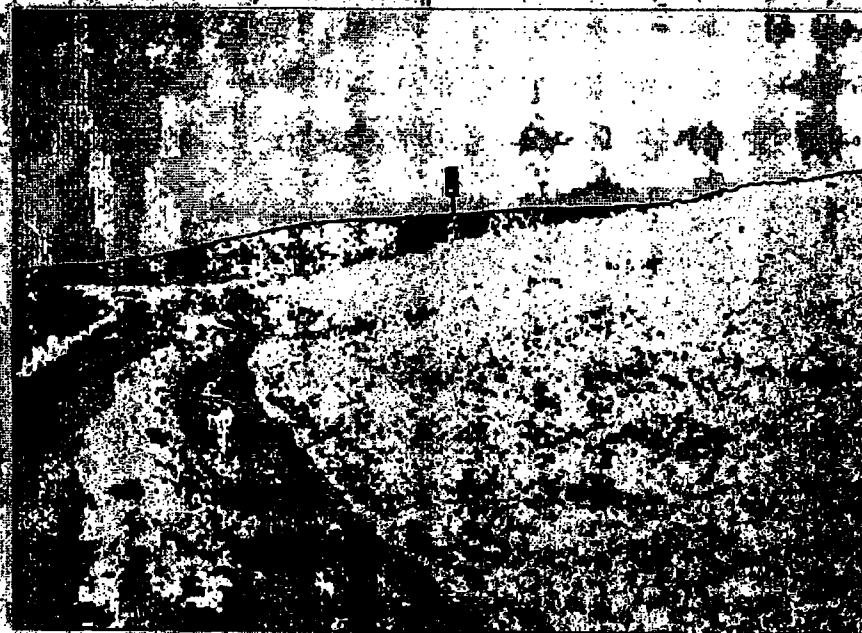
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo (facing east) showing north slope of previously
> filled area, methane gas vent flare, vegetation and drainage
south of north perimeter road.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 14 OF 20

U.S. EPA ID: ILD060360898

TDD: F05-8842-035

PAR: FDL025454

DATE: > Nov. 8, 1988

TIME: > 10:10

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER
CONDITIONS:

> Pky. cdy, high 50°F

> Light west → east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Photo showing wells used for monitoring presence of
> landfill gases, taken along northwest perimeter road.

DATE: > Nov. 8, 1988

TIME: > 10:20

DIRECTION OF
PHOTOGRAPH:

> Northeast

WEATHER
CONDITIONS:

> Pky. cdy, high 50°F

> Light west → east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > Northeast view of previously filled area, grassy/sloped
> side of landfill, methane/gas vent flare, northwest perimeter road and
> wooded area north and west of site

FIELD PHOTOGRAPH LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 5 OF 210

U.S. EPA ID: ILD060360898

TOD: F05-8802-035

PAR: FEL0254SA

DATE: > Nov. 8, 1988

TIME: > 1025

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER

CONDITIONS:

> Ry. Cl. y, high 85°F

> Light west - east

> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > View of sediment control lagoon at southwest corner

> of site. Vertical out fall pipe in foreground, wooded forest
> preserve in background, landfill in right corner (upper of photo)

DATE: > Nov. 8, 1988

TIME: > 1035

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER

CONDITIONS:

> Ry. Cl. y, high 85°F

> Light west - east

> winds 5-10 mph

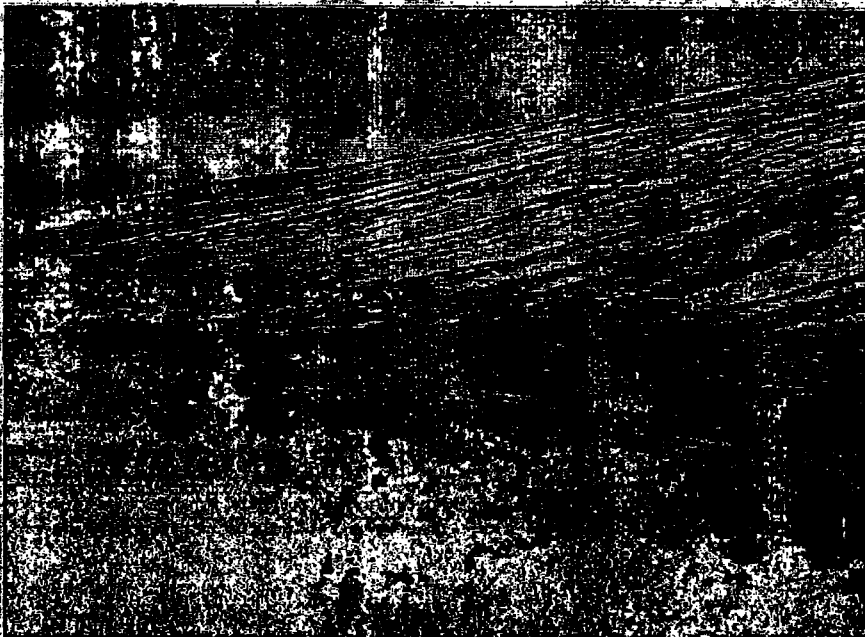
PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID

(if applicable):

> N/A



DESCRIPTION: > photo taken from south perimeter road showing southern

> face of landfill, grassy slope in background, freshly seeded slope in
> foreground. Drainage here is to the East towards the photographer

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 6 OF 20

U.S. EPA ID: ILDO60360 898

TOD: F05-PR02-035

PAN: FZ025454

DATE: > Nov. 8, 1988

TIME: > 1037

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER
CONDITIONS:

> Pky. Cldy, high @ 50°

> Light west - east
> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID
(if applicable):

> N/A



DESCRIPTION: > Continuation of southern face of finished area.

> receiving final cover in foreground, newly seeded area in background
Drainage ditch at base of slope continues downward toward photographer

DATE: > Nov. 8, 1988

TIME: > 1045

DIRECTION OF
PHOTOGRAPH:

> West

WEATHER
CONDITIONS:

> Pky. Cldy, high 50°

> Light west - east
> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID
(if applicable):

> N/A



DESCRIPTION: > Facing west along south edge of landfill, drainage converges

into a trench and flows into farm field south of site via a small
excavation in sidewall of trench. Soil sample 'SB' was obtained from the small excavation

FIELD PHOTOGRAPHY LOG SHEET

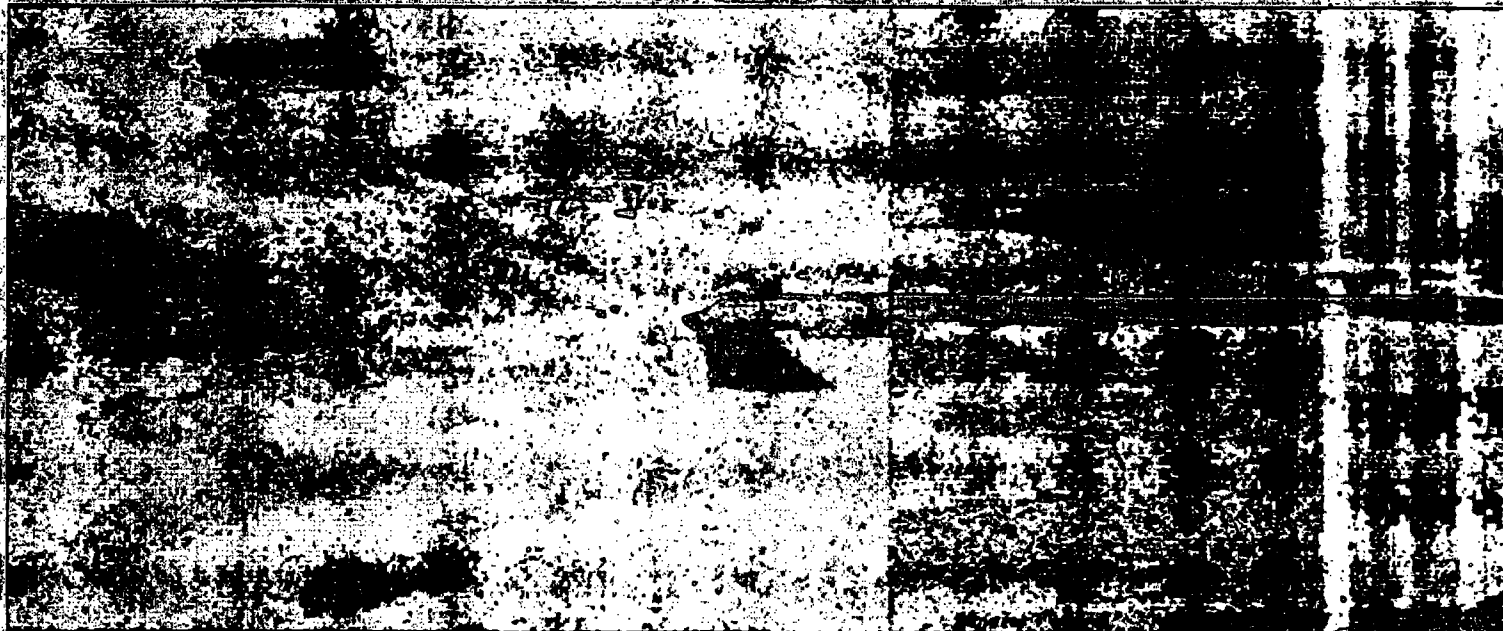
SITE NAME: GREEN VALLEY LANDFILL

PAGE 7 OF 20

U.S. EPA ID: IL D060360898

TDD: F05-8802-035

PAN: FL02545A



DATE: > Nov. 8, 1988 TIME: > 10:45 DIRECTION OF PHOTOGRAPH: > North PHOTOGRAPHED BY: > M. Martin

WEATHER CONDITIONS: > partly cloudy, high 50° F, light winds west to east 5 to mph SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Facing north from southeast corner of previously filled area. Active area is located near the top of the slope in left of photo; trucks in background are on top of previously filled area and backhoe/crane sits on coarse gravel beneath which lies clay liner material which will be the bottom of the landfill as it grows eastward.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 8 OF 20

U.S. EPA ID: TL-DOL-6360-898

TDD: F05-8802-035

PAN: FILE 02543A



DATE: > Nov. 8, 1988 TIME: > 1100 DIRECTION OF PHOTOGRAPH: > West PHOTOGRAPHED BY: > M. Martin

WEATHER CONDITIONS: > partly cloudy, high 50°F, light winds, west to east 5 to 10 mph SAMPLE ID (if applicable): > N/A

DESCRIPTION: > Facing southeast corner of previously filled area. Active area and fence for catching windblown litter lie at top of steep slope; newly placed coarse gravel lies on top of clay liner (white); small berm runs along top surface of new clay liner (center of photo); and excavation for future placement of re-worked clay liner is shown in left center of photo.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 9 OF 20

U.S. EPA ID: ILD060360898 TDD: F05-8802-035

PAN: FILO2545A

DATE: > Nov. 6, 1988

TIME: > 13.00

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> Pky. cldy, high 0.50

> Light Vesterly (W-S)

> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Martin

SAMPLE ID
(if applicable):

> MW 1



DESCRIPTION: > Monitoring well 1 being opened prior to purging
> and subsequent sample collection.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 10 OF 20

U.S. EPA ID: TL0060360 898

TDD: FD5-8802-035

PAN: FD025434

DATE: > Nov. 8, 1988

TIME: > 1015

DIRECTION OF
PHOTOGRAPH:

> WEST

WEATHER

CONDITIONS:

> Pky. Clp., high 50°F

> Light West - East

> Winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> SW2



DESCRIPTION: > Close up of location where surface water sample SW2

> (and duplicate) was gathered

DATE: > Nov. 8, 1988

TIME: > 1015

DIRECTION OF
PHOTOGRAPH:

> WEST

WEATHER

CONDITIONS:

> Pky. Clp., high 50°F

> Light West - East

> Winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> SW2



DESCRIPTION: > Perspective of location where surface water sample

> SW2 was collected

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 11 OF 20

U.S. EPA ID: ILD060360898 TO: FOSE 2802 035

PA: FEL0254SA

DATE: > Nov. 8, 1988

TIME: > 1015

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> P/V. Cl, high 50°F

> Light West - East

> Winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID
(if applicable):

> N/A



DESCRIPTION: > Landfill Manager (WME) video taping FET collecting

> SW2 south of bridge on Royce Road

DATE: > Nov. 8, 1988

TIME: > 1020

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> P/V. Cl, high 50°F

> Light West - East

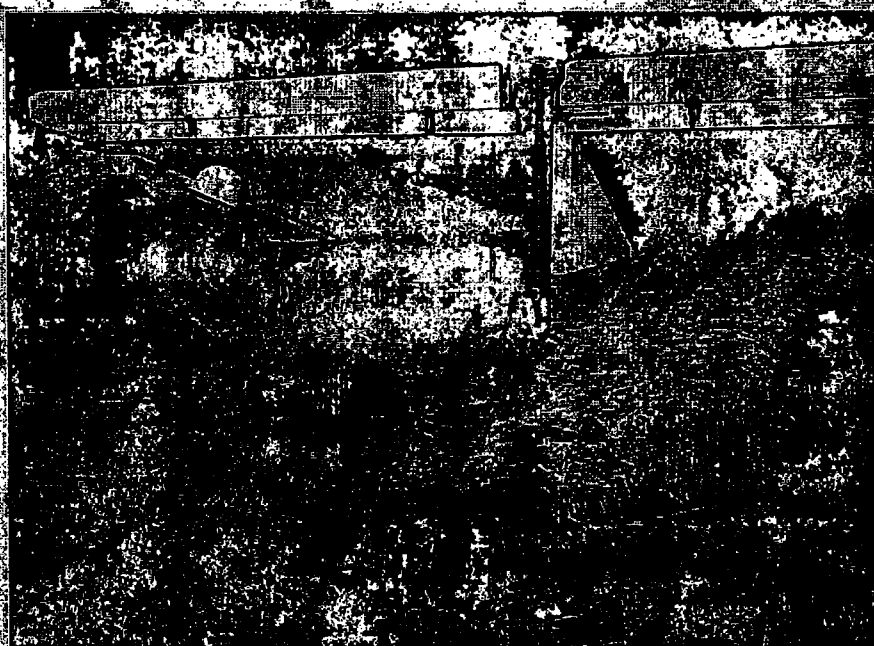
> Winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID
(if applicable):

> S2



DESCRIPTION: > Video taping the collection of S2

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 12 OF 20

U.S. EPA ID: ILD060360898

TDD: F05-8802-035

PAN: F06025454

DATE: > Nov. 8, 1988

TIME: > 10:45

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER

CONDITIONS:

> Pky: cldy, high @ 50%

> Light: west - east

> winds: 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S2



DESCRIPTION: > Close up of surface soil/sediment location S2

DATE: > Nov. 8, 1988

TIME: > 10:46

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER

CONDITIONS:

> Pky: cldy, high @ 60%

> Light: west - east

> winds: 10-15 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S2



DESCRIPTION: > Perspective of S2

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 13 OF 20

U.S. EPA ID: ILD060360898

TOD: F05-8802-035

PAN: F0625454

DATE: > Nov 8, 1988

TIME: > 1155

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER

CONDITIONS:

> Partly cloudy, high 65°F

> Light west to east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> S. Senger

SAMPLE ID

(if applicable):

> S1



DESCRIPTION: > Closeup of location where surface water sample S1
> was collected from.

DATE: > Nov 8, 1988

TIME: > 1156

DIRECTION OF
PHOTOGRAPH:

> Northeast

WEATHER

CONDITIONS:

> Partly cloudy, high 65°F

> Light west to east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> S. Senger

SAMPLE ID

(if applicable):

> S1



DESCRIPTION: > Perspective of S1

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 1 OF 20

U.S. EPA ID: ILDO60360898

TOD: F05-PB02-035

PAN: FIL0254SA

DATE: > Nov. 8, 1988

TIME: > 12:05

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER
CONDITIONS:

> Partly Cloudy, high 50°F

> Light west - east
> Winds 5-10 mph

PHOTOGRAPHED BY:

> K. Sims

SAMPLE ID
(if applicable):

> S11



DESCRIPTION: > Clos. up of location where soil sample S1 was

> collected from

DATE: > Nov. 8, 1988

TIME: > 12:05

DIRECTION OF
PHOTOGRAPH:

> East

WEATHER
CONDITIONS:

> Partly Cloudy, high 50°F

> Light west - east
> Winds 5-10 mph

PHOTOGRAPHED BY:

> K. Sims

SAMPLE ID
(if applicable):

> S1



DESCRIPTION: > Perspective of S1 near East Branch of

> DuPage River

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 5 OF 20

U.S. EPA ID: ILDO60360.898

TUD: F05-8802-035

PAN: F01025451

DATE: > Nov. 8, 1988

TIME: > 1315

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER
CONDITIONS:

> Ppy. Cdy, high 65°F

> Light west → east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S3



DESCRIPTION: > Close-up view of drainage ditch on site from
> which S3 was collected.

DATE: > Nov. 8, 1988

TIME: > 1315

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> Ppy. Cdy, high 60°F

> Light west → east

> winds 5-10 mph

PHOTOGRAPHED BY:

> D. Sullivan

SAMPLE ID

(if applicable):

> S3



DESCRIPTION: > Perspective of area surrounding surface pond
> sample S3.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 16 OF 20

U.S. EPA ID: ILD060360898

TOD: F05-8802-035

PAN: FIL025454

DATE: > Nov 8, 1988

TIME: > 1330

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER
CONDITIONS:

> My. Cl, high @ 50°F.

> Light west - east

> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Nesterenko

SAMPLE ID

(if applicable):

> S4



DESCRIPTION: > Closeup of location where soil sample S4 was

> collected from.

DATE: > Nov 8, 1988

TIME: > 1330

DIRECTION OF
PHOTOGRAPH:

> East

WEATHER
CONDITIONS:

> My. Cl, high @ 50°F.

> Light west - east

> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Nesterenko

SAMPLE ID

(if applicable):

> S4



DESCRIPTION: > Perspective of area surrounding soil sample location

> S4

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 17 OF 20

U.S. EPA ID: ILD060360 898

TDD: F05-8802-035

PAR: F060254SA

DATE: > Nov. 8, 1988

TIME: > 1405

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER
CONDITIONS:

> Thy. cldy, high 85°F

> Light west - east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> S. SENGEL

SAMPLE ID
(if applicable):

> S5

DESCRIPTION: > Close up of location from which soil sample S5 was
> collected.

DATE: > Nov. 8, 1988

TIME: > 1435

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER
CONDITIONS:

> Thy. cldy, high 80°F

> Light west - east

> Winds 5-10 mph

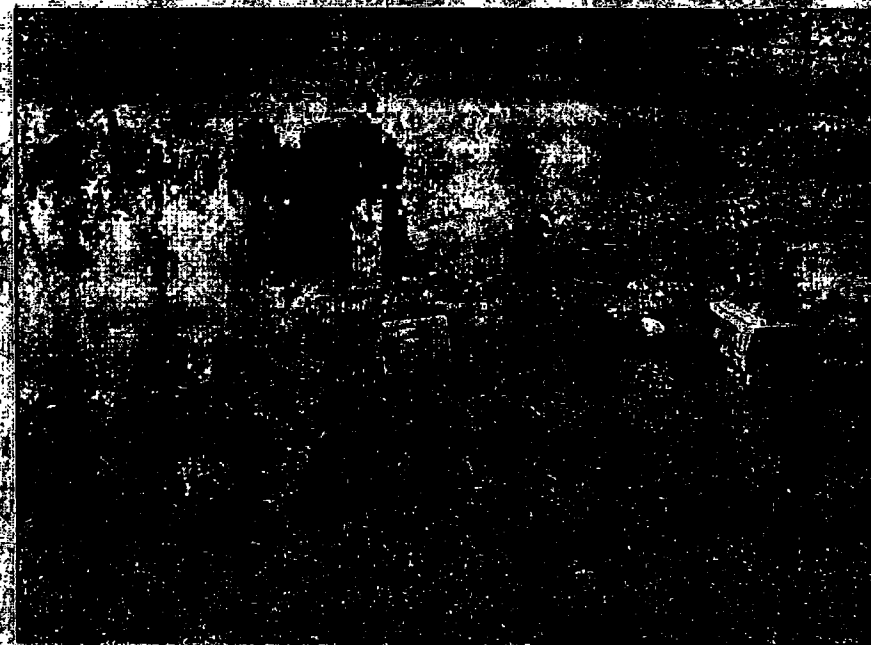
PHOTOGRAPHED BY:

> S. SENGEL

SAMPLE ID
(if applicable):

> S5

DESCRIPTION: > Perspective of area surrounding soil sample
> location S5



FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 18 OF 20

U.S. EPA ID: ILDO60360898

TDO: F05-8802-035

PAN: F126254SA

DATE: > Nov. 8, 1988

TIME: > 1500

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER

CONDITIONS:

> Ppy. Clp, high 50°F

> Light west - east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> S. SENER

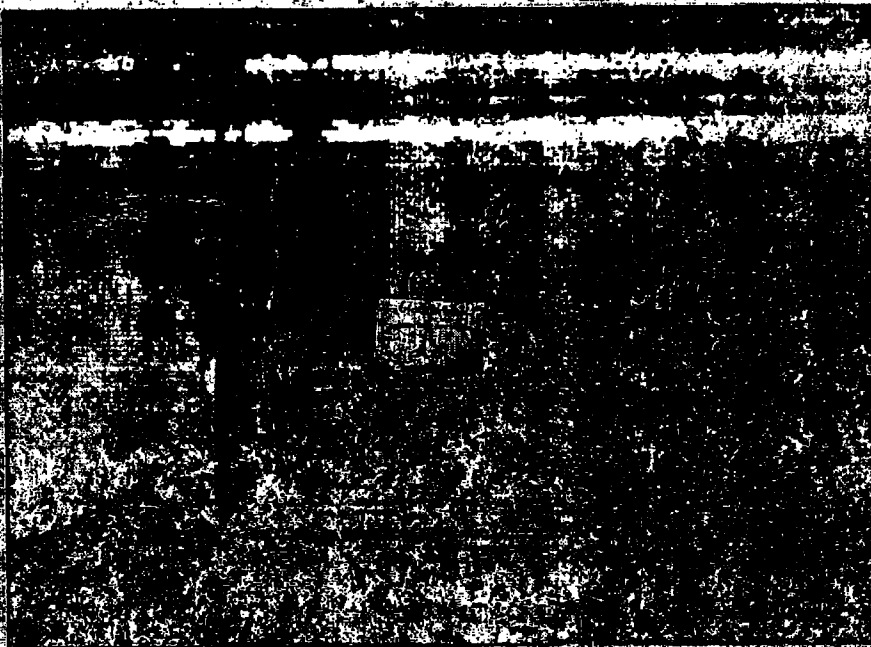
SAMPLE ID:

(if applicable):

> S16

DESCRIPTION: > Closeup of location from which surface soil

> sample S16 was collected.



DATE: > Nov. 8, 1988

TIME: > 1500

DIRECTION OF
PHOTOGRAPH:

> Northwest

WEATHER

CONDITIONS:

> Ppy. Clp, high 50°F

> Light west - east

> Winds 5-10 mph

PHOTOGRAPHED BY:

> S. SENER

SAMPLE ID:

(if applicable):

> S16

DESCRIPTION: > Perspective of area surrounding soil sample

> location S16 near sediment control lagoon



FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 19 OF 20

U.S. EPA ID: ILD060360898

TID: F05-8802-035

PAN: FTL025454

DATE: > Nov. 8, 1988

TIME: > 1530

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER
CONDITIONS:

> Pky, Cldy, high 60°F

> Light west → east
> winds 5-10 mph

PHOTOGRAPHED BY:

> M. Nesterenko

SAMPLE ID
(if applicable):

> S7

DESCRIPTION: > Close up of S7 and drainage ditch
> from which it was obtained.

DATE: > Nov. 8, 1988

TIME: > 1530

DIRECTION OF
PHOTOGRAPH:

> North

WEATHER
CONDITIONS:

> Pky, Cldy, high 60°F

> Light west → east
> winds 0-10 mph

PHOTOGRAPHED BY:

> M. Nesterenko

SAMPLE ID
(if applicable):

> S7

DESCRIPTION: > Perspective of soil sample location S7.

FIELD PHOTOGRAPHY LOG SHEET

SITE NAME: GREEN VALLEY LANDFILL

PAGE 20 OF 20

U.S. EPA ID: ILDC60360898

TDO: F05-8802-035

PAN: F0625451

DATE: > Nov. 9, 1988

TIME: > 1330

DIRECTION OF
PHOTOGRAPH:

> N/A

WEATHER
CONDITIONS:

> Partly Cloudy, high 45° F

> Light Southwest
> Winds 5-10 mph

PHOTOGRAPHED BY:

> K. Sims

SAMPLE ID
(if applicable):

> MW3



DESCRIPTION: > Close up of well from which sample MW3
> was obtained.

DATE: > Nov. 9, 1988

TIME: > 1330

DIRECTION OF
PHOTOGRAPH:

> WEST

WEATHER
CONDITIONS:

> Partly Cloudy, high 45° F

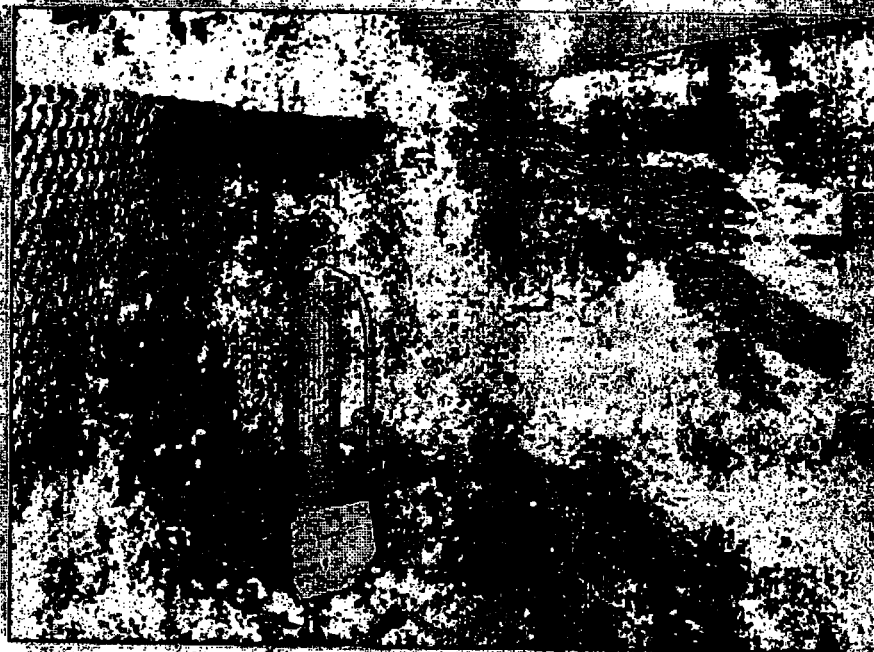
> Light Southwest
> Winds 5-10 mph

PHOTOGRAPHED BY:

> K. Sims

SAMPLE ID
(if applicable):

> MW3



DESCRIPTION: > Perspective of MW3 and surrounding
> area.

APPENDIX D

**U.S. EPA TARGET COMPOUND LIST AND
TARGET ANALYTE LIST
QUANTITATION/DETECTION LIMITS**

ADDENDUM A

**ROUTINE ANALYTICAL SERVICES
CONTRACT REQUIRED DETECTION AND QUANTITATION LIMITS**

Contract Laboratory Program
Target Compound List
Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Chloromethane	74-87-3	10 ug/L	10 ug/Kg
Bromomethane	74-83-9	10	10
Vinyl chloride	75-01-4	10	10
Chloroethane	75-00-3	10	10
Methylene chloride	75-09-2	5	5
Acetone	67-64-1	10	5
Carbon disulfide	75-15-0	5	5
1,1-dichloroethene	75-35-4	5	5
1,1-dichloroethane	75-34-3	5	5
1,2-dichloroethene (total)	540-59-0	5	5
Chloroform	67-66-3	5	5
1,2-dichloroethane	107-06-2	5	5
2-butanone (MEK)	78-93-3	10	10
1,1,1-trichloroethane	71-55-6	5	5
Carbon tetrachloride	56-23-5	5	5
Vinyl acetate	108-05-4	10	10
Bromodichloromethane	75-27-4	5	5
1,2-dichloropropane	78-87-5	5	5
cis-1,3-dichloropropene	10061-01-5	5	5
Trichloroethene	79-01-6	5	5
Dibromochloromethane	124-48-1	5	5
1,1,2-trichloroethane	79-00-5	5	5
Benzene	71-43-2	5	5
Trans-1,3-dichloropropene	10061-02-6	5	5
Bromoform	75-25-2	5	5
4-Methyl-2-pentanone	108-10-1	10	10
2-Hexanone	591-78-6	10	10
Tetrachloroethene	127-18-4	5	5
Toluene	108-88-3	5	5
1,1,2,2-tetrachloroethane	79-34-5	5	5
Chlorobenzene	108-90-7	5	5
Ethyl benzene	100-41-4	5	5
Styrene	100-42-5	5	5
Xylenes (total)	1330-20-7	5	5

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
Phenol	108-95-2	10 ug/L	330 ug/Kg
bis(2-Chloroethyl) ether	111-44-4	10	330
2-Chlorophenol	95-57-8	10	330
1,3-Dichlorobenzene	541-73-1	10	330
1,4-Dichlorobenzene	106-46-7	10	330
Benzyl Alcohol	100-51-6	10	330
1,2-Dichlorobenzene	95-50-1	10	330
2-Methylphenol	95-48-7	10	330
bis(2-Chloroisopropyl) ether	108-60-1	10	330
4-Methylphenol	106-44-5	10	330
N-Nitroso-di-n-dipropylamine	621-64-7	10	330
Hexachloroethane	67-72-1	10	330
Nitrobenzene	98-95-3	10	330
Isophorone	78-59-1	10	330
2-Nitrophenol	88-75-5	10	330
2,4-Dimethylphenol	105-67-9	10	330
Benzoic Acid	65-85-0	50	1600
bis(2-Chloroethoxy) methane	111-91-1	10	330
2,4-Dichlorophenol	120-83-2	10	330
1,2,4-Trichlorobenzene	120-82-1	10	330
Naphthalene	91-20-3	10	330
4-Chloroaniline	106-47-8	10	330
Hexachlorobutadiene	87-68-3	10	300
4-Chloro-3-methylphenol	59-50-7	10	330
2-Methylnaphthalene	91-57-6	10	330
Hexachlorocyclopentadiene	77-47-4	10	330
2,4,6-Trichlorophenol	88-06-2	10	330
2,4,5-Trichlorophenol	95-95-4	50	1600
2-Chloronaphthalene	91-58-7	10	330
2-Nitroaniline	88-74-4	50	1600
Dimethylphthalate	131-11-3	10	330
Acenaphthylene	208-96-8	10	330
2,6-Dinitrotoluene	606-20-2	10	330
3-Nitroaniline	99-09-2	50	1600
Acenaphthene	83-32-9	10	330
2,4-Dinitrophenol	51-28-5	50	1600
4-Nitrophenol	100-02-7	50	1600
Dibenzofuran	132-64-9	10	330
2,4-Dinitrotoluene	121-14-2	10	330
Diethylphthalate	84-66-2	10	330
4-Chlorophenyl-phenyl ether	7005-72-3	10	330

Table A
Contract Laboratory Program
Target Compound List
Semivolatiles Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SLUDGE SEDIMENT
Fluorene	86-73-7	10 ug/L	330 ug/Kg
4-Nitroaniline	100-01-6	50	1600
4,6-Dinitro-2-methylphenol	534-52-1	50	1600
N-nitrosodiphenylamine	86-30-6	10	330
4-Bromophenyl-phenylether	101-55-3	10	330
Hexachlorobenzene	118-74-1	10	330
Pentachlorophenol	87-86-5	50	1600
Phenanthrene	85-01-8	10	330
Anthracene	120-12-7	10	330
Di-n-butylphthalate	84-74-2	10	330
Fluoranthene	206-44-0	10	330
Pyrene	129-00-0	10	330
Butylbenzylphthalate	85-68-7	10	330
3,3'-Dichlorobenzidine	91-94-1	20	660
Benzo(a)anthracene	56-55-3	10	330
Chrysene	218-01-9	10	330
bis(2-Ethylhexyl)phthalate	117-81-7	10	330
Di-n-octylphthalate	117-84-0	10	330
Benzo(b)fluoranthene	205-99-2	10	330
Benzo(k)fluoranthene	207-08-9	10	330
Benzo(a)pyrene	50-32-8	10	330
Indeno(1,2,3-cd)pyrene	193-39-5	10	330
Dibenz(a,h)anthracene	53-70-3	10	330
Benzo(g,h,i)perylene	191-24-2	10	330

Table A
Contract Laboratory Program
Target Compound List
Pesticide and PCB Quantitation Limits

COMPOUND	CAS #	WATER	SOIL SEDIMENT SLUDGE
alpha-BHC	319-84-6	0.05 ug/L	8 ug/Kg
beta-BHC	319-85-7	0.05	8
delta-BHC	319-86-8	0.05	8
gamma-BHC (Lindane)	58-89-9	0.05	8
Heptachlor	76-44-8	0.05	8
Aldrin	309-00-2	0.05	8
Heptachlor epoxide	1024-57-3	0.05	8
Endosulfan I	959-98-8	0.05	8
Dieldrin	60-57-1	0.10	16
4,4'-DDE	72-55-9	0.10	16
Endrin	72-20-8	0.10	16
Endosulfan II	33213-65-9	0.10	16
4,4'-DDD	72-54-8	0.10	16
Endosulfan sulfate	1031-07-8	0.10	16
4,4'-DDT	50-29-3	0.10	16
Methoxychlor (Mariate)	72-43-5	0.5	80
Endrin ketone	53494-70-5	0.10	16
alpha-Chlordane	5103-71-9	0.5	80
gamma-chlordane	5103-74-2	0.5	80
Toxaphene	8001-35-2	1.0	160
AROCLOR-1016	12674-11-2	0.5	80
AROCLOR-1221	11104-28-2	0.5	80
AROCLOR-1232	11141-16-5	0.5	80
AROCLOR-1242	53469-21-9	0.5	80
AROCLOR-1248	12672-29-6	0.5	80
AROCLOR-1254	11097-69-1	1.0	160
AROCLOR-1260	11096-82-5	1.0	160

Table A (Cont.)

CONTRACT LABORATORY PROGRAM
TARGET ANALYTE LIST (TAL)
INORGANIC DETECTION LIMITS

Compound	Procedure	Detection Limits	
		Water (µg/L)	Soil Sediment Sludge (mg/kg)
aluminum	ICP	200	40
antimony	furnace	60	2.4
arsenic	furnace	10	2
barium	ICP	200	40
beryllium	ICP	5	1
cadmium	ICP	5	1
calcium	ICP	5,000	1,000
chromium	ICP	10	2
cobalt	ICP	50	10
copper	ICP	25	5
iron	ICP	100	20
lead	furnace	5	1
magnesium	ICP	5,000	1,000
manganese	ICP	15	3
mercury	cold vapor	0.2	0.008
nickel	ICP	40	8
potassium	ICP	5,000	1,000
selenium	furnace	5	1
silver	ICP	10	2
sodium	ICP	5,000	1,000
thallium	furnace	10	2
tin	ICP	40	8
vanadium	ICP	50	10
zinc	ICP	20	4
cyanide	color	10	2

3767:1

APPENDIX E

**WELL LOGS OF THE AREA OF THE SITE
AND ON-SITE BOLEHOLE LOGS
SUPPLIED BY HYDRO-SEARCH, INC.**

NON RESPONSIVE

NON RESPONSIVE

NON RESPONSIVE

NON RESPONSIVE

NON RESPONSIVE



NON RESPONSIVE



S L BOREHOLE LOG

SITE NAME AND LOCATION Greene Valley Landfill, Naperville, Illinois 2129N, 2391E			DRILLING METHOD: 7-3/4" OD HOLLOW STEEL Auger				BOREHOLE NO. MNG122				
							SHEET 1 of 5				
			SAMPLING METHOD: 24" split barrel continuous sampling				DRILLING				
			WATER LEVEL				START TIME 1153	FINISH TIME 1216			
			TIME				DATE 10/7/87	DATE 10/8/87			
DATUM MSL			ELEVATION 708.3			CASING DEPTH					
DRILL NO. CNE-55			SURFACE CONDITIONS								
ANGLE vertical BEARING —											
SAMPLE HAMMER TORQUE 350 FT.-LBS											
DEPTH IN FEET (ELEVATION)	BLOWS/FOOT ON CASING (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	UNIT WEIGHT
0	4/7	CL	0.0 - 12.5: SILTY CLAY some gravel (fine to medium rounded to subrounded dolomite), some iron and manganese staining present, slightly plastic, stiff, yellow brown (10YR 4/4) (CL, Weathered Wadsworth Till)	#1							
8/10	SS										
40%											
2	10/13			#2							
17/29	SS										
80%											
4	3/6			#3							
10/12	SS										
60%											
6	6/8			#4							
12/17	SS										
75%											
8	4/10	#5									
15/21	SS										
75%											
10	9/17	#6									
26/34	SS										
65%											
12	8/16	#7	12.5 - 44.5: SILTY CLAY, trace gravel (fine to coarse rounded to subrounded shale and dolomite), slightly stiff, plastic, dry, gray 10YR 4/1 to 10YR 5/1, (CL, Wadsworth Till)								
17/21	SS										
65%											
14	4/8	#8									
11/16	SS										
60%											

DRILLING CONTR Wisconsin Test Drilling
Schofield, Wisconsin

SL01399

LOGGED BY Doug Pavlick
 DATE 10/7-8/87 CHK'D BY D. Buser

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MWG122

SOIL BOREHOLE LOG

SITE NAME AND LOCATION Greene Valley
Landfill, Naperville, Illinois
2129N, 2391E

DRILLING METHOD: 7-3/4" OD HOLLOW STEEL
Auger

BORING NO.
MNG122

SAMPLING METHOD: 24" split barrel
continuous sampling

SHEET
2 of 5

DRILLING

WATER LEVEL

START

FINISH

TIME

1153

1216

DATE

DATE

DATE

DATUM MSL

ELEVATION 708.3

CASING DEPTH

10/7/87

10/8/87

DRILL RIG CME-55

SURFACE CONDITIONS

ANGLE vertical **BEARING** —

SAMPLE HAMMER TORQUE 350 **FT.-LBS**

DEPTH IN FEET (ELEVATION)	BLOWS/BLK ON SAMPLER (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
16	6/10 12/18 20%			#9							
18	4/7 11/15 55%			#10							
20	10/15 18/21 95%			#11							
22	13/12 13/19 5%			#12							
24	3/16 16/21 85%			#13							
26	9/12 26/32 0%			#19							
28	4/11 16/23 95%			#15							
30											

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Schofield, Wisconsin

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S IL BOREHOLE LOG

SITE NAME AND LOCATION Greens Valley Landfill, Naperville, Illinois 2129N, 2391E		DRILLING METHOD: 1-3/4" OD Hollow Stem Auger				BORING NO. MNG122	
		SAMPLING METHOD: 24" split barrel continuous sampling				SHEET 3 of 5	
						DRILLING	
		WATER LEVEL				START TIME 1153	
TIME				DATE 10/7/87		DATE 10/8/87	
DATE				CASING DEPTH			
DATUM MSL		ELEVATION 708.3					
DRILL RIG CME-55		SURFACE CONDITIONS					
ANGLE Vertical BEARING ---							
SAMPLE HAMMER TORQUE 350 FT.-LBS							

DEPTH IN FEET (ELEVATION)	BLOWS & PERCENT (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
30	4/9 19/23 95%			#16							
32	8/8 13/15 90%			#17							
34	5/10 15/22 30%			#18							
36	13/17 15/22 65%			#19							
38	10/13 22/23 85%			#20							
40	21/31 34/41 25%			#21							
42	7/7 12/24 75%			#22							
44	14/15 32/47 90%			#23							

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SOIL BOREHOLE LOG

SITE NAME AND LOCATION Greene Valley Landfill, Naperville, Illinois 2129N, 2391E		DRILLING METHOD: 7-3/4" OD Hollow Stem Auger				BORING NO. MKG122					
						SHEET 4 OF 5					
		SAMPLING METHOD: 24" split barrel continuous sampling				DRILLING					
						START TIME 1153	FINISH TIME 1216				
		WATER LEVEL									
				TIME							
				DATE							
DATUM MSL ELEVATION 708.3				CASING DEPTH		DATE 10/7/87	DATE 10/8/87				
DRILLING CME-55		SURFACE CONDITIONS									
ANGLE Vertical BEARING ---											
SAMPLE HAMMER TORQUE 350 FT.-LBS											
DEPTH IN FEET (ELEVATION)	BLOWS/INCH OF SOIL (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWER/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SHRINK RATIO	OTHER TESTS
46	15/35 45/100 50%	[Pattern]	44.5 - 62.6: SANDY GRAVEL, some silt, gravel present at 48 to 50 ft., (fine to coarse grained, rounded to subrounded dolomite), poorly sorted, light gray to yellowish brown, wet (GP, Lemont Drift)	#24							
48	100 10%			#25							
50	35/35 40/39 60%			#26							
52	100 25%			#27							
54	100 25%			#28							
56	30/64 49/22 50%			#29							
58	36/32 27/28 60%			#30							
60											

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 SL01590

S. L BOREHOLE LOG

SITE NAME AND LOCATION **Greens Valley
Landfill, Naperville, Illinois
2129N, 2391E**

DRILLING METHOD: **7-3/4" OD Hollow Stem
Auger**

BORING NO. **MNG122**

SAMPLING METHOD: **24" split barrel
continuous sampling**

SHEET
5 OF **5**

DRILLING

WATER LEVEL

START

FINISH

TIME

TIME

TIME

DATE

DATE

DATE

CASING DEPTH

10/7/87

10/8/87

DATUM **MSL**

ELEVATION **708.3**

DRILL RIG **CME-55**

SURFACE CONDITIONS

ANGLE **vertical** BEARING **---**

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET
(ELEVATION)

RECOVERED
FOOTAGE
(PERCENT)

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

FLOW/ROOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

OTHER
TESTS

89/33
25/33
80%

23/14
9/11
65%

3/7
100%

3/4
7/14
100%

62.6 - 68.0: SILTY CLAY, trace rounded to
subrounded fine dolomite gravel, grayish
brown, (10YR 5/2), wet, (CL, Yorkville
Till)

BOB 68 ft.

#31
SS

#32
SS

#33
SS

#34
SS

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SL01591

S IL BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
1563N, 842E**

DRILLING METHOD: **7-3/4" OD Hollow Stem
Auger**

BORING NO.
MWG123

SAMPLING METHOD: **24" split barrel
continuous sampling**

SHEET
2 of 5

DRILLING

WATER LEVEL

START

FINISH

TIME

TIME

TIME

DATE

DATE

DATE

CASING DEPTH

10/4/87

10/5/87

DATUM **MST.**

ELEVATION **707.8**

DRILL NO **ONE 55**

SURFACE CONDITIONS **Dry, Near Fence and North Side of**

ANGLE **vertical** BEARING **---**

Road

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET
(ELEVATION)

BLOWS/AN
ON CASING

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

BLOWS/FOOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

PICTURE
TESTS

14.5 - 37.25: **SILTY CLAY**, trace gravel
(fine to coarse, rounded to subrounded
dolomite), trace sand (fine to coarse,
rounded to subrounded), dry, stiff,
plastic, dark gray (10YR 4/1), (CL,
Wadsworth Till)

16

25/33
36/23
0%

18

5/7
9/13
65%

20

5/9
11/15
95%

22

4/8
12/16
95%

24

4/10
10/12
85%

26

5/9
11/15
95%

28

7/8
11/15
80%

#9

SS

#10

SS

#11

SS

#12

SS

#13

SS

#14

SS

#15

SS

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SOIL BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
1563N, 842E**

DRILLING METHOD: **7-3/4" OD Hollow Stem
Auger**

BORING NO. **MWG123**

SAMPLING METHOD: **24" split barrel
continuous sampling**

SHEET **3 of 5**

DRILLING

WATER LEVEL

START

FINISH

TIME

TIME

1540 1605

DATE

DATE

10/4/87 10/5/87

DATUM **MST.**

ELEVATION **707.8**

CASING DEPTH

DRILL # **ONE 55**

SURFACE CONDITIONS

Dry, Near Fence and North Side of

ANGLE **Vertical** BEARING **—**

Road

SAMPLE HAMMER TORQUE **350 FT.-LBS**

DEPTH IN FEET (ELEVATION)	BLOW/BLANK (% COVER)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTICITY INDEX %	DENSITY	WATER PIPETE
30	9/11 15/28 100%			#16 SS							
32	9/13 18/23 100%			#17 SS							
34	8/15 38/49 93%			#18 SS							
36	31/42 46/79 100%			#19 SS							
38	52/100 50%		37.25 - 63.0: SANDY GRAVEL, some silt, (fine to coarse grained, rounded to subrounded dolomite), poorly sorted, yellowish brown (10YR 5/4, to 10YR 5/6), (GP, Lemont Drift)	#20 SS							
40	15/100 15%			#21 SS							
42	15/45 100			#22 SS							
44	50%			#23 SS							
	14/36 31/39										

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SOIL BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
1563N, 842E**

DRILLING METHOD: **7-3/4" OD Hollow Stem
Auger**

BORING NO.
MWG123

SAMPLING METHOD: **24" split barrel
continuous sampling**

SHEET
4 of 5

DRILLING

WATER LEVEL

START

FINISH

TIME

TIME

TIME

DATE

DATE

DATE

CASING DEPTH

10/4/87

10/5/87

DATUM **MSL**

ELEVATION **707.8**

DRILL RIG **CMP 55**

SURFACE CONDITIONS **Dry, Near Fence and North Side of**

ANGLE **vertical** BEARING **—**

Road

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET
(ELEVATION)

BOWLS/
BLANK
ON SAMPLER
(RECOVERY)

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

BLOWER/ROOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

OTHER
TESTS

46

14/50
49/47
65%

48

6/24
37/36
75%

50

17/24
27/19
90%

52

17/13
26/33
100%

54

17/13
26/33
85%

56

11/16
16/21
60%

58

8/8
9/19
50%

60

#24
SS

#25
SS

#26
SS

#27
SS

#28
SS

#29
SS

#30
SS

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Schofield, Wisconsin

SL01595

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S L BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
1563N, 842E**

DRILLING METHOD: **7-3/4" OD Hollow Stem
Auger**

BORING NO.
MNG123

SAMPLING METHOD: **24" split barrel
continuous sampling**

SHEET
5 of 5

DRILLING

WATER LEVEL

START

FINISH

TIME

TIME

TIME

DATE

DATE

DATE

CASING DEPTH

10/4/87

10/5/87

DATUM

MSL

ELEVATION **707.8**

DRILL RIG

CME 55

SURFACE CONDITIONS

Dry, Near Fence and North Side of

ANGLE

Vertical BEARING

Road

SAMPLE HAMMER TORQUE

350 FT.-LBS

DEPTH IN FEET
(ELEVATION)

FLOW/AN
ON CASING
(RECOVERY)

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

FLOW/FOOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

OTHER
TESTS

8/8
10/11
85%

7/11
22/29
80%

5/10
20/22
20%

10/11
14/22
70%

63.0 - 68.0: SILTY CLAY, trace rounded to subrounded fine to medium dolomite gravel, wet, gray (10YR 5/1) (CL, Yorkville Till)

#31
SS

#32
SS

#33
SS

#34
SS

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DRILLING CONTR

Wisconsin Test Drilling

Schofield, Wisconsin

SL01596

SILT BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
15N, 1016E**

DILLING METHOD: **Hollow Stem Auger**

BORING NO. **MWG125**

SAMPLING METHOD:

SHEET **1 OF 5**

DILLING

WATER LEVEL

START

FINISH

TIME

TIME **0742**

TIME **0848**

DATE

DATE **10/9/87**

DATE **10/10/87**

CASING DEPTH

DATUM: **MSL**

ELEVATION **703.4**

DRILL RIG **CME 750 ATV**

SURFACE CONDITIONS

ANGLE **VERTICAL** BEARING **—**

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET
(ELEVATION)

BLOWS/BLANK
ON SAMPLER
(RECOVERY)

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

BLOWS/FOOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

OTHER
TESTS

0.0 - 24.0: CLAY, trace to a little silt,
trace sand and small gravel, (up to 1-
1/2"), dark brown (10YR 4/3) grading to
yellowish brown (10YR 5/4, 5 YR 4/6, and
10YR 5/6), damp to moist (CL, weathered to
unweathered Wadsworth Till)

5/10
15/17

10/15
16/18

3/6
9/22

6/11
16/18

5/8
11/16

3/8
15/17

5/10
10/15

3/5
10/15

#1
SS

#2
SS

#3
SS

#4
SS

#5
SS

#6
SS

#7
SS

#8
SS

DRILLING CONTR Wisconsin Test Drilling

Schofield, Wisconsin

SL04652

LOGGED BY **David B. Holmes**

DATE **10/9-10/87** CHK'D BY **D. Euser**



S 1L BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
15N, 1016E**

DRILLING METHOD: **Hollow Stem Auger**

BORING NO. **MNG125**

SAMPLING METHOD:

SHEET **2** of **5**

DRILLING

WATER LEVEL

START

FINISH

TIME

TIME

0848

DATE

DATE

10/10/87

DATUM **MSL**

ELEVATION **703.4**

CASING DEPTH

10/9/87

DRILL RIG **CME 750 ATV**

SURFACE CONDITIONS

ANGLE **vertical** BEARING **—**

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET
(ELEVATION)

BLOWS AND
BLANKS
(IN COVER)

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

BLOWS/FOOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

OTHER
TESTS

16

6/10
13/20

18

8/100

20

13/16
15/16

22

7/11
13/18

24

92/49
42/39

24.0 - 52.5: SAND with gravel, trace silt,
(angular dolomite) fine to medium grained
sand grading to coarse size, yellowish
brown (10YR 6/4 to 10YR 5/4) dry to moist,
(GP, Lenoir Drift)

26

14/100
(5")

28

52/50
78/51

30

#9

#10

#11

#12

#13

#14

#15

DRILLING CONTR Wisconsin Test Drilling

Schofield, VT

SL04653

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SOIL BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
15N, 1016E**

DRILLING METHOD: **Hollow Stem Auger**

BORING NO.
MWG125

SAMPLING METHOD:

SHEET
3 of 5

DRILLING

WATER LEVEL

START

TIME
0742

FINISH
TIME
0848

TIME

DATE

DATE

DATE
10/9/87

DATE
10/10/87

DATUM **MSL**

ELEVATION **703.4**

CASING DEPTH

DRILL RIG **CME 750 ATV**

SURFACE CONDITIONS

ANGLE **Vertical** BEARING **—**

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET (ELEVATION)	BLOWS/INCH OF CASING (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
30	32/39 35/36			#16 SS							
32	21/12 23/44			#17 SS							
34	28/25 38/61			#18 SS							
36	20/24 21/21			#19 SS							
38	42/47 59/45			#20 SS							
40	15/29 47/38			#21 SS							
42	27/42 53/66			#22 SS							
44	34/40 43/52			#23 SS							

DRILLING CONTR **Wisconsin Test Drilling**

Schofield, VT

SL04654

LOGGED BY **David B. Holmes**

DATE **10/9-10/87** CHK'D BY **D. Buser**

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S IL BOREHOLE LOG

SITE NAME AND LOCATION Greens Valley Landfill, Naperville, Illinois 15N, 1016E		DRILLING METHOD: Hollow Stem Auger				BOREHOLE NO. HWG125						
						SHEET 4 of 5						
		SAMPLING METHOD:				DRILLING						
						START TIME 0742						
						FINISH TIME 0848						
DATUM MSL		ELEVATION 703.4		WATER LEVEL		DATE 10/9/87						
DRILL NO CME 750 ATV		SURFACE CONDITIONS										
ANGLE VERTICAL BEARING ---												
SAMPLE HAMMER TORQUE 350 FT.-LBS												
DEPTH IN FEET (ELEVATION)	BLOWS/ALLEN ON SAMPLER (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS					
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SHRINK GRAVITY	UNITS	
46	16/22	[Patterned Box]	52.5 - 60.0: CLAY, trace to a little silt, trace to a little medium sand, trace to some gravel (angular dolomite up to 1-1/2") grayish brown (2.5Y 5/2) moist to wet to saturated, (CL, Yorkville Till)	#24								
48	36/51			SS								
50	56/61			#25								
52	50/55			SS								
54	16/31			#26								
56	36/25	SS										
58	5/9	[Patterned Box]		#27								
60	13/26			SS								
62	12/19			#28								
64	50/43			SS								
66	17/21			#29								
68	22/18	SS										
70	9/22	[Patterned Box]		#30								
72	100			SS								

DRILLING CONTR Wisconsin Test Drilling

Schofield, Wisconsin

LOGGED BY David B. Holmes

DATE 10/9-10/87 CHK'D BY D. Buser

SL04655



S IL BOREHOLE LOG

SITE NAME AND LOCATION Greens Valley Landfill, Naperville, Illinois 15N, 1016E		DRILLING METHOD: Hollow Stem Auger				BORING NO. MWG125	
						SHEET 5 of 5	
		SAMPLING METHOD:				DRILLING	
						START	FINISH
		WATER LEVEL TIME DATE				TIME 0742	TIME 0848
DATUM MSL		ELEVATION 703.4		CASING DEPTH		DATE 10/9/87	DATE 10/10/87
DRILL RIG CME 750 ATV		SURFACE CONDITIONS					
ANGLE Vertical		BEARING —					
SAMPLE HAMMER TORQUE 350 FT.-LBS							

DEPTH IN FEET (ELEVATION)	BLOWS/INCH (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SHRINK GRAVITY	OTHER TESTS
60	180 (0.7')		60.0 - 71.5: GRAVEL (large), trace to some sand, trace silt, trace clay angular dolomite with broken shaly dolomite, grayish brown (2.5Y 5/2), wet to saturated, (GP, weathered Niagara Dolomite Bedrock)	#31 SS							
62	140 (0.3')			#32 SS							
64				#33 SS							
66				#34 SS							
68				#35 SS							
70				#36 SS							
72				#37 SS							
			71.5 BOB								

DRILLING CONTR Wisconsin Test Drilling

Schofield, Wisconsin

LOGGED BY David B. Holmes

DATE 10/9-10/87 CHK'D BY B. Buser

SL04656



SOIL BOREHOLE LOG

SITE NAME AND LOCATION Green Valley Landfill, Naperville, Illinois 810N, 4099E	DRILLING METHOD: Hollow stem auger				BORING NO. MWG129	
					SHEET 1 of 5	
	SAMPLING METHOD: split spoon 12" x 24" RX core barrel				DRILLING	
					START	FINISH
	WATER LEVEL	41.3'	47.8'		TIME 1258	TIME 1600
TIME	1223	1400				
DATE	10/2/87	10/2/87		DATE	DATE	
				10/1/87	10/2/87	
DATUM MSL	ELEVATION		CASING DEPTH			

DRILL RIG CME 750 ATV	SURFACE CONDITIONS
ANGLE VERTICAL	BEARING —
SAMPLE HAMMER TORQUE 350 FT.-LBS	

DEPTH IN FEET (ELEVATION)	BLOWS/ FEET (OR SAMPLER RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS
0	3/4 9/12		0 - 25.5: CLAYEY SILT to SILTY CLAY, trace gravel, (fine to medium grain, angular) trace sand, yellowish brown (10YR 5/6) to brown (10YR 5/3), moist, (CL, Wadsworth Till)	#1 SS							
2	3/5 8/14			#2 SS							
4	3/6 10/12			#3 SS							
6	3/8 12/22			#4 SS							
8	5/8 13/20			#5 SS							
10	4/8 15/22			#6 SS							
12	7/13 20/22			#7 SS							
14	10/14 19/33			#8 SS							

DRILLING CONTR Wisconsin Test Drilling

Schofield, Wisconsin

SL04669

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DATE 10/1-2/87 CHK'D BY D. Buser

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HYDROLOGISTS-GEOLOGISTS-ENGINEERS

MWG129

SOIL BOREHOLE LOG

SITE NAME AND LOCATION **Greens Valley
Landfill, Naperville, Illinois
810N, 4099E**

DRILLING METHOD: **Hollow stem auger**

BORING NO.
MWG129

SAMPLING METHOD: **split spoon 12" x 24"
NX core barrel**

SHEET
2 of 5

DRILLING

WATER LEVEL	41.3'	47.8'		
TIME	1223	1400		
DATE	10/2/87	10/2/87		

START	TIME
	1258
FINISH	TIME
	1600

DATE	DATE
10/1/87	10/2/87

DATUM **MSL** ELEVATION

CASING DEPTH

DRILL RIG **CME 750 ATV**

ANGLE **vertical** BEARING **—**

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET (ELEVATION)	BLOWS/SPOT (ON CASING)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	OTHER TESTS

16	6/9 14/19			SS							
18	6/12 14/17			SS							
20	11/12 14/17			SS							
22	9/8 12/19			SS							
24	5/15 21/24			SS							
26	55/57 39/60		25.5 - 46.0: SAND, fine to coarse grained with depth, some silt, some gravel (small to medium, subangular dolomite), poorly sorted, yellowish brown (10YR 5/6 to 10YR 6/4), (SM-SP, Lemont Drift).	SS							
28	100			SS							

DRILLING CONTR **Wisconsin Test Drilling**

Schofield, Wisconsin

SL04670

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SIL BOREHOLE LOG

SITE NAME AND LOCATION **Greens Valley
Landfill, Naperville, Illinois
810N, 4099E**

DRILLING METHOD: **Hollow stem auger**

BORING NO.
MWG129

SAMPLING METHOD: **split spoon 12" x 24"
NX core barrel**

SHEET
3 of 5

DRILLING

WATER LEVEL	41.3	478		
TIME	1223	1400		
DATE	10/2/87	10/2/87		
CASING DEPTH				

START	FINISH
TIME 1258	TIME 1600
DATE 10/1/87	DATE 10/2/87

DATUM **MSL** ELEVATION

DRILL RIG **CME 750 ATV**

SURFACE CONDITIONS

ANGLE **vertical** BEARING **—**

SAMPLE HAMMER TORQUE **350 FT.-LBS**

DEPTH IN FEET (ELEVATION)	BLOW/BLK (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SHRINK GRAVITY	OTHER TESTS
30	14/20			#16							
	22/29			SS							
32	19/22			#17							
	24/29			SS							
34	35/40			#18							
	39/33			SS							
36	13/18			#19							
	35/39			SS							
38	32/35			#20							
	65/50			SS							
40	40/50			#21							
	43/43			SS							
42	30/48			#22							
	100			SS							
44	48/55			#23							
	100			SS							

DRILLING CONTR **Wisconsin Test Drilling**

Schofield, Wisconsin

SL04671

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SOIL BOREHOLE LOG

SITE NAME AND LOCATION **Greens Valley
Landfill, Naperville, Illinois
810N, 4099E**

DRILLING METHOD: **HOLLOW STEEL AUGER**

BORING NO.
MW129

SAMPLING METHOD: **SPLIT SPOON 12" X 24"
RX CORE BARREL**

SHEET
4 OF 5

DRILLING

WATER LEVEL	41.3'	47.8'		
TIME	1223	1400		
DATE	10/2/87	10/2/87		
CASING DEPTH				

START	FINISH
TIME 1258	TIME 1600
DATE 10/1/87	DATE 10/2/87

DATUM **MSL** ELEVATION

DRILL RIG **CME 750 ATV**

SURFACE CONDITIONS

ANGLE **Vertical** BEARING **---**

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET
(ELEVATION)

BLOWS/AMP
ON SAMPLER
(RECOVERY)

SYMBOL

SAMPLE NUMBER
AND
DESCRIPTION OF MATERIAL

SAMPLER AND BIT

CASING TYPE

BLOWS/FOOT
ON CASING

TEST RESULTS

WATER
CONTENT %

LIQUID LIMIT %

PLASTIC
LIMIT %

SPECIFIC
GRAVITY

OTHER
TESTS

46

43/21
19/33

46.0 - 48.0: **CLAYEY SILT**, trace sand, with
pieces of broken dolomite, cobble or
boulder, gray, moist (CL, Yorkville Till)

48.0 Begin Coring

#24
SS

DRILLING CONTR **Wlaconsin Test Drilling**

Schofield, Wlaconsin

SL04672

LOGGED BY **David B. Holmes**

DATE **10/1-2/87** CHK'D BY **D. Buser**

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HYDROLOGISTS-GEOLOGISTS-ENGINEERS

ROCK BOREHOLE LOG

SITE NAME AND LOCATION Green Valley Landfill Naperville, Illinois 810N, 4099E				DRILLING METHOD: Hollow Stem Auger				BORING NO. MVG129					
								SHEET 5 OF 5					
				SAMPLING METHOD: Split Spoon 12"x24"				DRILLING					
				NX Core Barrel				START					
								FINISH					
WATER LEVEL		41.3'	47.8'			TIME		TIME					
TIME		1223	1400			1258		1600					
DATE		10/2/87	10/2/87			DATE		DATE					
CASING DEPTH						10/1/87		10/2/87					
DATUM MSL				ELEVATION 688.9									
DRILL NO. QHE 750 ATV				SURFACE CONDITIONS									
ANGLE Vertical				BEARING —									
SAMPLE HAMMER TORQUE 350				FT.-LBS									
DEPTH IN FEET (ELEVATION)	BLOW/BL ON SAMPLER (RECOVERY)	CORES			SOIL DESCRIPTION OR ROCK LITHOLOGY	SYMBOL	ROCK STRUCTURE	SAMPLER AND BIT	CASING TYPE	BLOW/FOOT ON CASING	TEST RESULTS		
		RUN NO.	NO. AND SIZE OF CORE PIECES	% RECOVERY							ROD	DEPTH IN FEET	PERMEABILITY OIL/SEC.
48													
50		1		25"	Dolomite, very broken, greenish gray (weathered) Niagara								
52													
54													
56		2		12"	Dolomite								
58													
60													
					EOB: 60 ft.								

DRILLING CONTR Wisconsin Test Drilling

Schofield, Wisconsin

PL 03653

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DATE 10/1-2/87 CHK'D BY D. Buser

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HYDROLOGISTS-GEOLOGISTS-ENGINEERS

S IL BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
2218N, 4896E**

DRILLING METHOD: **7-3/4" O.D. Hollow
Stem Auger**

BORING NO.
BGL131

SAMPLING METHOD: **continuous split
barrel sampling**

SHEET
1 OF **3**

DRILLING

WATER LEVEL **28.6'**

TIME **1740**

DATE **9/15**

CASING DEPTH

START

**DW
1545**

FINISH

**TR
1050**

DATE

9/15/87

DATE

9/16/87

DATUM **MSL**

ELEVATION **671.3**

DRILL RIG **CME 45B ATV**

SURFACE CONDITIONS **grassy meadow approximately 10 ft. west of**

ANGLE **vertical** BEARING **---**

MI-G117

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET (ELEVATION)	BLOWS/AN ON SAMPLER (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SHRINKAGE SWELLING	TESTS
0	11/7		0.0 - 0.2: CLAYEY SILT, black (5YR 2.5/1), organic, damp, (ML, Solum)	#1							
	8/13			SS							
	50%										
2	4/8		0.2 - 5.0: SILTY CLAY, trace sand, trace to a little dolomitic gravels, slightly plastic fines, brown (10YR 5/3) mottled to white (10YR 8/2), reddish with depth to dark yellowish brown, (10YR 4/4), homogeneous, somewhat stiff, dry, (CL, Weathered Wadsworth Till)	#2							
	9/11			SS							
	75%										
4	7/14			#3							
	10/12		5.0 - 13.0: SAND AND GRAVEL to GRAVELLY SAND, well graded, trace silt and clay, increasing medium to fine sand with depth, subrounded to subangular gravel, predominantly dolomite, minor chert, occasional cobble, light yellowish brown (2.5Y 6/4) to dark yellowish brown (10YR 4/6), minor iron staining (7.5YR 4/6), loose to very loose, dry (SW-GW, Proglacial Outwash)	SS							
	50%										
6	10/13			#4							
	9/10			SS							
	50%										
8	3/10			#5							
	9/9			SS							
	50%										
10	5/6			#6							
	8/8			SS							
	50%										
12	4/3			#7							
	2/2			SS							
	54%										
14	3/6			#8							
	8/9			SS							
	62%			53							

DRILLING CONTR Wisconsin Test Drilling

Schofield, Wisconsin

SL04674

LOGGED BY **D.G. Paul**

DATE **9/15-16/87** CHK'D BY **D. Buser**

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HYDROLOGISTS-GEOLOGISTS-ENGINEERS

MWG131

SIL BOREHOLE LOG

SITE NAME AND LOCATION Greene Valley Landfill, Naperville, Illinois 3313N, 3576E		DRILLING METHOD: 7-3/4" OD Hollow Stem Auger				BORING NO. MWG131	
						SHEET 2 of 3	
		SAMPLING METHOD: 24" split barrel continuous sampling				DRILLING	
						START FINISH TIME TIME 1050 1545	
		WATER LEVEL 28.6'				DATE 9/15/87	DATE 9/16/87
		TIME 1740					
		DATE 9/15					
DATUM MSL ELEVATION 671.3		CASING DEPTH					
DRILL RIG CME - 45B ATV		SURFACE CONDITIONS grassy meadow approx. 10 ft. west of					
ANGLE Vertical BEARING ---		MW-G117					
SAMPLE HAMMER TORQUE 350 FT.-LBS							

DEPTH IN FEET (ELEVATION)	DOWNHOLE REMARKS (RECOVERY)	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWER/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SHRINK SWELL %	OTHER TESTS
16	12/16 60%		13.0 - 22.4: SAND to SAND AND GRAVEL, poorly graded, trace silt and clay increasing to little silt and clay with depth, sand grades from fine to coarse with depth, increasing gravel with depth, dark yellowish brown (10YR 4/6) to light olive brown (2.5Y 5/4), laminated, loose, dry (SP-GP, Proglacial Outwash)	#9 SS							
18	9/9 11/12 58%			#10 SS							
20	8/9 8/10 54%			#11 SS							
22	3/4 7/8 83%			#12 SS							
24	3/3 17/18 54%		22.4 - 24.0: STIFF CLAY to CLAYEY SILT, trace fine subrounded dolomitic gravel, minor shale, slightly plastic to plastic fines, very dark gray (5Y 4/1 - 3/1) to gray (5Y 5/1), homogeneous, somewhat stiff, moist (CL, Wadsworth Till)	#13 SS							
26	25/20 21/20 58%		24.0 - BOB: SANDY GRAVEL to SAND AND GRAVEL, well graded, trace to a little silt and clay, subangular to subrounded dolomitic gravel, non-plastic fines, pale olive (5Y 6/3) to yellowish brown (10YR 5/6) occasional small lenses (<0.5 ft.) silt and clay, and well sorted sand, somewhat dense to dense, wet at 27.5 ft. (SW-GW, Lemont Drift)	#14 SS							
28	29/30 29/22 6%			#15 SS							

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DRILLING CONTR Wisconsin Test Drilling

Schofield, WI

LOGGED BY D.G. Paul

SL04675

DATE 9/15-16/87 CHK'D BY D. Buser

SOIL BOREHOLE LOG

SITE NAME AND LOCATION **Greene Valley
Landfill, Naperville, Illinois
3313N, 3576E**

DRILLING METHOD: **7-3/4" OD Hollow Stem
Auger**

BORING NO.
MWG131

SAMPLING METHOD: **24" split barrel
continuous sampling**

SHEET
3 of 3
DREILING

WATER LEVEL	28.6'			
TIME	1740			
DATE	9/15			
CASING DEPTH				

START	TIME	FINISH	TIME
	1050		1545
DATE	9/15/87	DATE	9/16/87

DATUM **MSL** ELEVATION **671.3**

DRILL NO. **CME - 45B ATV**

SURFACE CONDITIONS **grassy meadow approximately 10 ft.**

ANGLE **vertical** BEARING **—**

West of M-617

SAMPLE HAMMER TORQUE **350** FT.-LBS

DEPTH IN FEET (ELEVATION)	BOWEN & BAKER CORRECTION	SYMBOL	SAMPLE NUMBER AND DESCRIPTION OF MATERIAL	SAMPLER AND BT	CASING TYPE	BLOWS/FOOT ON CASING	TEST RESULTS				
							WATER CONTENT %	LIQUID LIMIT %	PLASTIC LIMIT %	SPECIFIC GRAVITY	WATER PIERS
30	30/23 62%			#16 SS							
32	18/10 25/25 42%			#17 SS							
34	30/22 24/62 62%			#18 SS							
36	51/50 38%			#19 SS							
38			BOB 37.5 ft. Well Set at 37.0 ft.								

LOGGED BY **D.G. Paul**

DATE **9/15-16/87** CHK'D BY **D. Buser**

SL04676

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